In M[illegible]x--7 E-5 (1929) 1930 SF10 Chiriguano SF10
Chané SF8
Guaraní SM4

/200 cont./

and id.- 1, pp. 161-196; Church, pp. 206-227; Mujía; etc.). I shall limit myself to tracing here, in their main lines, the characteristics of the great Guarani migration which ended in the formation of the Chiriguano tribe.

The Chiriguano Indians belong to the Tupi-Guarani linguistic family. A branch separated from the great Guarani nation or, more exactly, a swarm separated from the whole group of tribes of Paraguay and southern Brazil called Guarani, they came to establish themselves at the foot of the Andes at the end of the 15th and the beginning of the 16th century after crossing the Chaco plains.

/201/ The causes of this great movement, which swept along so many thousands of Guarani toward the frontiers of the Inca Empire, are explained by the singular attraction which metal objects, clothes, in a word everything that can make life easier and more beautiful, exerted and continue to exert on the Indians. The Guarani of Paraguay and the Tupi of the Brazilian coast had known for a long time about Peru and its riches. From there they used to receive bronze instruments and ornaments of silver and sometimes also of gold (1). At the same time as these objects,

1. On the trade relations between the peoples of the Andes and the tribes of the Chaco, Paraguay, and Brazil, cf. Nordenskiöld, 9, pp. 255-259.

confused descriptions reached them of these mountain peoples, so strange, who lived in stone huts, had "deer with long hair" at their service, and who decorated their persons with brilliant jewels. Bronze axes, necklaces, bracelets, breastplates, diadems, and goblets of silver reached them by a trade route whose exact position is unknown, but which probably used to pass through the northern Chaco. The Chané /Chane/ who lived in direct contact with the populations of the Inca Empire and traded with them, played the role of brokers, and with them as middlemen these tools and ornaments reached Paraguay, passing from hand to hand (2).

2. Hernández, p. 322: "They were asked of what race are those who have the silver and the

G 195 484 /313 cont./ The exploration of Alvar Núñez Cabeza de Vaca, continued by his lieutenant, Francisco de Ribera, is a second example that shows very well that the excursions of the Guarani did not constitute exceptional deeds that were extremely dangerous to accomplish.

Having arrived at a certain distance from the spurs of the Andes, the Guarani entered the territory of the Chané Indians.

It was in one of these numerous warlike ventures of the Guarani that the Portuguese adventurer Alejo García took part with several other comrades.

G 195 169 484 [162] I am convinced that the 2,000 (according to Díaz de Guzmán, p. 76) Guarani whom this adventurer accompanied as far as Peru formed only one of the numerous bands of warriors of this nation who, each year, from every point of the Guarani territory, used to cross the Paraguay River, then the deserts of the Chaco.

G 114 195 169 484 194 Ruy Díaz de Guzmán, who reports this event, sees things in too simple a light. A migration is not made at one time nor in one year. That of the Guarani lasted perhaps several decades, without, however, necessarily speaking of centuries. Twenty or thirty years must have sufficed for the nucleus of the Chiriguano nation to form between the upper Pilcomayo and the Guapay River. The penetration of the Guarani into /314/ the Chaco took place in a rather chaotic and incoherent fashion. The conquistadors were continually meeting on their route Guarani groups who, for one reason or another, could not succeed in joining their brothers established beyond the Chaco. These Guarani, who blazed the trails followed by the invaders, were valuable guides for the Spanish adventurers, and they were the ones who led them to Peru. For long years there were uninterrupted communication and incessant coming and going between Paraguay and the eastern slope of the Bolivian Andes.

G 195 167 648 484

/320 cont./

C 175 342

interesting: "they make a very big dormitory and, within it, as many small rooms as there are residents, and so small that they do not have room for more persons, and it is enough for them, because they do not have furniture, nor do they have wearing apparel and hence they go about naked." /Translated from the Spanish./ These facts agree on every point with those of the Relaciones geográficas, etc. (Vol. II, Plate CIV) and of Lizárraga (Vol. I, p. 259) on the same subject. The Guaraní, just like the Tupinamba and other Tupi tribes, lived in malocas, gigantic halls capable of containing more than 150 persons and which often in themselves formed the village. The existence of this type of dwelling among the Chiriguano in the 16th and 17th centuries constitutes new proof for the recent character of their migration. In the 18th century we find them already in possession of the small rectangular house which they still have now and where one single family lives. (See Métraux, ? p. 51.)

C [114] [113]

C [171]

C [174] [69]

C 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 [101]

novelist Garcilaso which might allow one to suppose that he really knew who the Chiriguano were. As for this conquest by the Inca, it would have been barely an attempt at conquest... Garcilaso confuses the Chiriguano with all the tribes of the eastern slopes of the Andes whom he had vaguely heard mentioned. Let us note that he is the only one to attribute this expedition to the Inca Tupanki, while the other chroniclers, better informed, are satisfied to say that the Inca Tupanki made an expedition against the Antis, probably around Cuzco. Unfortunately the vogue this pleasant writer enjoyed at a time when the history of America was still in limbo bluffs some modern critics into believing him, and they go so far as to prefer one of his unwarranted affirmations to the serious /321/ and precise evidence of chroniclers who get their information at first hand and from reliable sources.

/337 cont./ Peruvians?

villages were there under the command of hereditary caciques. The middle course of the Parapití formed their boundary to the east. In the 16th century the Chiriguano constituted the most important and remarkable nation of the western Chaco. The statistics concerning them vary a great deal: the figures given with their usual exaggerations, vary between 41,000 and 15,000 warriors. The Chané are included in this number, which completely removes all value from these statistics." (Kersten, pp. 60-63.)

Today the boundaries of the Chiriguano have stayed about the same. But even though they inhabit a territory whose extent has varied little, their situation has none the less undergone great changes. Several thousand half-breeds from Tarija, Santa Cruz, and Chuquisaca have settled inside this area that we have defined. A Chiriguano frontier no longer exists, but only remains of villages and small groups which still mark the former extent of the tribe. On the other hand, the number of Chiriguano has diminished terribly and is diminishing each day, so that a few years from now the true habitat /333/ of the Chiriguano will be contained between the Parapití and the Pilcomayo and will be reduced to the former Franciscan missions and to several valleys of the Precordillera, such as those of Caipipendí and Iglembé (1).

1. Some historians not well informed about the ethnic geography of South America have claimed that in the 16th century the Chiriguano lived well beyond the boundaries I have indicated. One of them (Dr. Pulgencio Moreno) went so far in this direction that he attributes to the Chiriguano the possession of a large part of northwestern Argentina and pushes this fancy to the point of locating them almost as far as in the province of Córdoba. Mr. Coni in an excellent monograph, documents in hand, has done good justice to these bold allegations and has demonstrated that these hypotheses were without foundation.

/336 cont./

241 412 191 243 have described here. These finds were made in the ruins of the Alfarcito and of the Pukará de Tilcara (Debenedetti, 6, Fig. 17 and p. 37) and at the Huerta in the same Quebrada de Humahuaca. Numerous wooden shovels have been dug up at La Paya (Ambrosetti, 6, Figs. 336-337, pp. 433-434), and Ambrosetti supposes with justification that they were halted like those of the modern Chiriguano. Debenedetti (5, p. 35) obtained a specimen of this instrument at Kipón in Salta province.

[911] This type of shovel is particularly well represented in the archeological material of the Chilean coast. Numerous specimens have been found in Calama, Chiu-Chiu, and Paya in Tarapacá province (Bowman, 3, Vol. II, pp. 331-332 and Plate LXVIII 21 and Uhle, 3, pp. 15-16 and Plate I).

[911] The half-breeds and Indians of the Bolivian altiplano still work the earth today with a spade which in no way differs from that of their ancestors; moreover, it shows great similarity /337/ to the wooden shovel of the ancient Chiriguano (Chervin, 8, 216, Fig. 139).

241 412 191 243 Nordenskiöld (8, pp. 30-32), studying the distribution of this cultural element, established that it was peculiar to the Andean zone and the adjoining regions. The Chiriguano shovel nonetheless has a characteristic feature for which we should look in vain on all the specimens found inside the boundaries of the Inca Empire: this is the crescent-shaped handgrip. It corresponds quite precisely to the crutches terminating the oars in use among the tribes of Brazil, Paraguay, and the Guianas and on which the paddler puts his hand flat.

241 412 191 243 The Chiriguano formerly lived in a region rich in rivers and streams, and they probably made use of paddles of this type to go up or down them. Once settled at the foot of the Andes, the resemblance between their former /Fig. 5 appears here/ oars and the shovels they saw in the hands of the Chané or the Chicha must have struck them; and they naturally sought to adapt to the new instruments this detail of structure whose convenient paddling had shown them. Such a hypothesis is not too adventuresome, for do we not have in the Chaco some shovels which have exactly the appearance of oars? (On this subject see the Ashluslay shovel published by Nordenskiöld, 9, p. 30, Fig. 1.)

In Mexico--Ind. 0-5 (1959) 1930 SF10 Chiriguano SF10
Arawakan Indians SR6

/427 cont./
which preceded Inca culture. If one compares the present-day pottery of the Chiriguano with that of the Quicha /Quechua/ of Cuzco, certain analogies will appear, but they will be neither abundant nor conclusive enough to establish a direct filiation. Aryballoses are missing or rare, ornithomorphic dishes seldom found, etc.; on the contrary, we have seen how multiple and close the ties are between this pottery and that of the Chincha-Atacama period. Chiriguano pottery, in relation to that of Cuzco, is in a situation analogous to that of northwestern Argentina: on an Andean but original base, influences from Cuzco have been superposed. This Inca action on the Chicha is attested to even today by /428/ the presence among the Chiriguano of footed vessels of the purest Inca type and apodal ones of the same origin. Arising from the same influence, one may add certain decorative motifs, with which I have already dealt.

Arawak and Amazonian tradition is scarcely represented, except by formed bowls (*zoomorfos*), vessels with a ribbed belly, those with a body in the shape of a truncated cone and a subspherical belly, and perhaps by some motifs (T-shaped figures, Plate XXXVIII, 1).

The conclusion of this chapter will be: there exists today and for some years to come a civilization which, closely related to that of the Chicha, continues an art earlier than that of the Inca but influenced by them. May this fact make archeologists cautious!

Chapter VII

Calebashes

The second art in which the Chiriguano excel is pyrography and engraving on calebashes. When pottery-making was an essentially feminine activity, pyrography was the province of the men. Nordenskiöld (5, pp. 233-236) thinks, completely wrongly it seems to me, that pyrography is of Andean origin. He advances in support of this opinion the advantages that knowledge of metal offers to this art. Nevertheless, the populations of the

Lt Métraux--277 E-S (1929) 1930 SF10 Chiriguano SF10
Tupi-Guaran. SL6
Tup.namba 509
Guarani 2M
Chané SF8

/436 cont./

E80
E 286 531 191

animals or human beings. There is nothing like that among the Chiriguano. The simplicity /437/ of their fabrics forms a striking contrast with the richness and variety of the decoration of their pottery. Their inferiority in this respect is far from corresponding to the skillfulness which is their wont in all their activities. It is enough to see the admirable pieces of work executed by little Chiriguano girls in the missions to realize what they would have been capable of if historic traditions had not held them away from this art. Their distant Tupi-Guarani ancestors were acquainted with only rudimentary forms of weaving, and it can be asserted that /Fig. 95 appears here/ this industry remained foreign to all the Tupi tribes which did not undergo the influence of a nation more civilized than they. The Tupinamba of the Brazilian coast apparently practiced only the double-thread technique (Doppelfadentechnick) by means of which they used to make their hammocks. The ancient chroniclers note the use of the tipoy among the ancient Guarani of Paraguay, which is an indication of the existence of weaving among that subdivision of the Tupi family. Their present-day descendants, the Kaingué /Caingua/, could pass for good weavers to judge by the fineness of the several fabrics which have been collected among them. These are for the most part wide belts which they pass between their legs and knot around their loins. In reality, weaving is in its beginnings among them, /438/ as is shown by their loom. It is only a simple frame around which the warp threads are coiled. The woof is passed through, thread after thread, as in darning.

C 286 197
F-G 286 194
T 286 194
G 286 [175] [291]
G [291]

No doubt it was the Chané who taught the Chiriguano to weave, and as they had probably not reached a /Fig. 96 appears here/ very high level in this art, they could only transmit to their successors and suzerains, the Chiriguan, a still little-developed technique, which the latter have scarcely improved on.

Ee 286 197

/439 cont./

p. 171 and Map 21). Their baskets being so bad shape, the Guarayú wanted to make some new ones and were very annoyed not to find in the region into which they had come the palm trees with pinnate leaves which they were in the habit of using for this purpose. Now, Guarayú and Chiriguano are brothers in race and language and emigrated at the same period from Paraguay to settle in the vicinity of the Andes. When leaving their country of origin, both were acquainted with this type of basket used by their ancestors, the Guarani, the Tupinamba of the Brazilian coast, /440/ and still favored among their first cousins from Paraguay, the Kaingua (Métraux, 2, p. 204). The disappearance of this cultural element among the Chiriguano is due solely to the lack of appropriate raw materials.

In order to make up for the absence of back baskets, indispensable to a farming people /Fig. 98 appears here/ the Chiriguano borrowed from their neighbors in the Chaco, either the Mataco or the Choroti, the carrying nets (in Chiriguano: aflapoka) whose use is so widespread among the latter and is so characteristic of their civilization. Carrying nets today are in general use among the Chiriguano, and in every village each family has at /Fig. 99 appears here/ least one (Figs. 98 and 99). In spite of this wide diffusion, the Chiriguano aflapoka betrays its origin by its form and technique (see Figs. 100 and 101 /see pp. 283 -285/), which are both found in the tribes we have just enumerated (Nordenskiöld, 9, p. 208, Technique I). Although considerably more advanced on the way to civilization than the seminomadic tribes of the Chaco, the Chiriguano do not by any means equal them /441/ in the art of making nets. The aflapoka I collected cannot be compared with the deep bags which the Matako or the Choroti, for example, make for the same purpose. In the village of Machareti, where Toba live with Chiriguano, it is the former who furnish the latter with the /Fig. 100 appears here/ carrying nets they need (see Fig. 99 /see p. 282/) (1).

1. Nordenskiöld (10, p. 163, Fig. 49 A) gives the detail of the technique of a Chiriguano carrying net. This technique is not found on any

[TEXT Continues on P. 283]

/441 cont./

●194 Everything thus leaves us to suppose that, in the early period of
197 their settling on the western confines of the Bolivian Chaco, the
286 Chiriguano procured by barter the carrying nets intended to re-
482 place the back baskets they had used until then. It was only later
[439] that they learned to make them themselves, adopting only the simplest and easiest of techniques besides. Thanks to this example we can catch alive the causes which have motivated the adoption of a new cultural element after the disappearance of another which rendered the same services. For that two factors have come into play, the physical environment and the ethnic one. There was adaptation and borrowing at the same time. This fact also proves that a relatively civilized people never hesitates to appropriate the inventions of more barbaric tribes when they find some advantage in it.

285 The present poverty of the basketwork industry among the
19 Chiriguano does not imply that it is insignificant and worthless. Perhaps before the decline of this nation it was more widely represented in each village. I was able to observe that the disappearance of basketwork /442/ went along with the influence of the white men. But, for the reasons I have given above, I do not believe that at any time there could have been found among the Chiriguano that abundance of objects made of basketwork which travelers noted among the Indians of Guiana or the Amazon basin. Formerly, when the ancestors of the Chiriguano were still living in Paraguay and Brazil, they possessed basketwork identical with that of the tribes inhabiting the regions I have alluded to. Proof of it is furnished by the survival among the modern Chiriguano of various types of baskets, fire fans, and sieves, of which we find /Fig. 101 appears here/ the exact equivalent only in Guiana and the Amazon basin. As we shall ascertain in the course of this study, the identity between these two ethnic areas is perfect from this point of view. The only difficulty is to know whether in this case it is a matter of the remains of an industry peculiar to the Chané Indians of Arawak origin, whose influence upon the Chiriguano was considerable, or whether this basketwork only continues that of the ancient Guarani emigrants. In my opinion
ccc the question does not need to be asked. The basketwork of the

C /442 cont./ The basketwork of the
285 ancient Guarani or Tupinamba did not differ essentially in tech-
171 nique, form, or processes of ornamentation from the basketwork
174 of the north of southern America (Métraux, 2, pp. 249-255). It must have offered more than one point of similarity with that of the Chané, and we must consider the modern basketwork of the Chiriguano the heir of the basketwork common to these two /443/ nations. Let us notice in passing that the basketwork of the populations of tropical America has a certain unity. Nevertheless,

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286

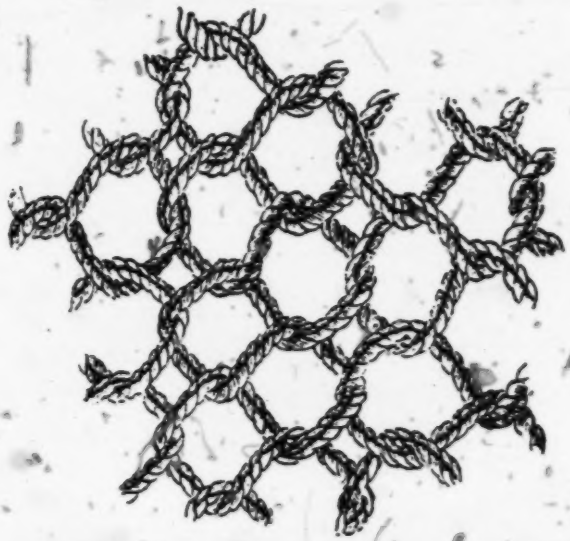

Fig. 101. Technique of the net of Fig. 99 (Technique V, according to Nordenskiöld, 9, p. 208).

C it was in the Guianas that it reached perfection.
285 After their great migration to the foot of the Andes, the
171 Chiriguano seem to have adopted basketwork of a new technique,
174 which doubtless was unknown to their ancestors and racial brothers in Paraguay and Brazil. This technique is characteristic of all the baskets I am putting under the heading of wicker work /named in English/ in the following pages. As we shall see,
Ce [285] this technique also exists in the Guianas, and it is possible that
[171] it was brought into the Bolivian Chaco by the Arawak nation
[174] of the Chané. The center of dispersion of the Arawak must be
ooo

/457 cont./

C 415 285 Sieves are of two kinds. The first category includes those whose meshes are close together and composed of fine strips of karandaí leaves intercrossing in a binary rhythm. Sieves of this type belong in the basketwork called twilled. The Chiriguano give them the name of urumpé and use them in preference to the others, whose usage is limited.

The second category includes sieves with wide meshes. The strips forming them cross in checkerwork, that is, the woof passes alternately under, then over, an element of the warp. The Chiriguano designate sieves of this type by the name of urumpesa, and they use them for sifting ground corn when they wish to obtain a coarse flour.

C G 415 285 191 Some of these sieves are real works of art, but they cannot be compared with the magnificent specimens from Guiana, on which the alternation of the black and white elements produce geometric figures of the handsomest effect. It is probable that formerly the Chiriguano had identical sieves, as can be supposed from the one on Plate LXXXII, which is composed of a warp and a woof whose gray and white elements are arranged in such a way as to form dark and light bands on which concentric squares stand out.

C 415 171 The sieve is widespread in all of tropical America, where it is used not only for corn flour but also for that which the natives make from bitter manioc. It is unknown to the primitive populations of the Chaco, who have not even felt the need to borrow it from the Chiriguano or Chané. The populations of the Inca Empire /458/ did not know its use. The urumpé is a utensil common to nearly all the Tupi-Guarani tribes; it has been described or noted among the Tupinamba, the Guarani, the Kainguá /Caingua/, the Guarayú, the Pauserna, the Apiaká /Apiaca/, and the Parintintin. The Chiriguano must therefore have taken along with them when they emigrated from Paraguay, which does not exclude the fact that they may also have found it in use among the Chané.

C [174]

/468 cont./

412 171 At La Paya, Ambrosetti (6, Fig. 254, p. 484) discovered combs cut out of a small wooden board and some composite combs. Instead of simply recording the coexistence of two different types of combs /Plate LXXXVII appears here/ /469/ in the same place, a very natural phenomenon by reason of the heterogeneous character of the culture of La Paya, Ambrosetti puts forth the strange hypothesis that these combs served for carding wool, without taking the trouble to inquire whether this instrument was known in pre-Columbian times.

303 322 462 412 The making of combs, like all wood carving, is an essentially masculine job.

412 194 The table on Plate LXXXVII indicates my idea of the morphological evolution of the different forms of combs which I have collected.

Chapter XII

Furniture

352 [114] Since the diverse cultural elements which constitute the furniture of the Chiriguano have been completely studied by Nordenskiöld (10, pp. 8-22), I shall limit myself to mentioning them here, insisting only on several details. /Fig. 124 appears here./ /See p. 338./

[342] Let us enter a Chiriguano hut. The door we open is a kind of screen of reeds or a cowhide hardened in the sun. Daylight penetrates the interior through this opening. The only important [513] piece of furniture is a wooden cot (Fig. 125), a kind of bedstead generally occupied by two persons between whom one or two children come /470/ to slip in somehow or other. Nor do the Chiriguano hesitate to sleep on the ground on an oxhide, which they spread out in front of their house. On the upper Pilcomayo, in nearly all the huts one can /Fig. 125 appears here/ /See p. 339./ see one or two hammocks which serve either as seats during the day [286] or as cradles for small children. Their technique, that of the [177] double thread (Doppelfadentechnik), continues an old Guarani

[Text Continues on P. 338]

I: Métraux--336 E-5 (1929) 1930 SF10 Chiriguano SF10

Plate LXXXVII /left side/

412
104

Table indicating the way in which the evolution of the different types of comb might have come about. Prov.: 1 and 2, Yumbía; 3, Isirié (upper Pilcomayo); 4 and 5, Ñawirenda; 6, Igüembé; 7, Caipipendí; 8, Igüembé; 9, Ivu; 10 and 11, Tiwiraití; 12 (after Nordenskiöld); 13, Yumbía; 14, Igüembé; 15, Ñawirenda; 16 and 17, Carurutí; 18, Ñawirenda; 19 and 20, Ibopeytí; 21, Saladito. /Combs 9-15 are shown on the next page./

/Right side of Plate LXXXVII/

412
● 174

/See the caption on the left side of the plate on the preceding page./

/488 cont./

757 114 The explorer Eric von Rosen tried to demonstrate that some objects found in northwestern Argentina are clyster tubes or nozzles. Nordenskiöld is also of this opinion. As for me, I am all the more tempted to adopt this hypothesis because I could not otherwise explain the presence of this instrument among the Chiriguano. No Tupi tribe, as a matter of fact, with the exception of the Omagua on the upper Amazon, seems to have resorted to enemas in case of illness; at least not one of the numerous travelers who gave their attention to these Indians mentions the operation among them. There is no doubt that the Chiriguano borrowed this curative method and the corresponding instrument from the nearby Andean peoples. We know that the Quichua /Quechua/ gave each other enemas, as is proved by the discovery of a leather syringe in a pre-Hispanic grave of the Ollachea Valley in eastern Peru (Nordenskiöld, 14, Fig. 74, p. 188). (To be continued.)

757 171 174

000 /The bibliography, pp. 488-493, is omitted in the translation; see the foreign text. The following "Table of Contents" appears at the end of this volume of the Revista, along with the tables of contents for the other articles in the volume. The lists of plates and figures which follow the table of contents in the translation were made up from the captions and are not part of the original text./

/598/ Studies on the Culture of the Chiriguano Indians

by Alfred Métraux

	page
Preface	1
I. Material Culture	5
Introduction	5
Historical outline of the formation of the Chiriguano nation	6
Agriculture	63
Cooking and food	80
Food resources	80
Fish	93
Cooking	97

2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10 ●
Chané SF8

The shamans (ipaye) enjoyed considerable prestige. When invited by a village to assist its inhabitants in some predicament, they were received with marks of great respect and were lavishly entertained. They served the community as rain makers and as doctors. In the latter capacity, they treated patients or protected the whole village against epidemics. Their curing technique followed the usual South American pattern of blowing and sucking the sick person. They retired to small cabins to communicate with spirits. Blowing tobacco smoke played a large part in the shamanistic ritual. The medicine men were expected to discover the evil charms that threatened the individual or the community as a whole. Shamans were often put to death for their failure to bring rain or to dispel an epidemic. Old women were often called to cure diseases which required the administration of drugs.

During carnivals, which, under the Bolivian influence, have become a period of wild rejoicing, young men wearing masks (pl. 44) of soft wood amuse the spectators by their antics and tricks. As the best masks are those carved by the *Chané*, it is likely that the clown interludes are survivals of dances by masked persons representing nature spirits or ghosts, such as are performed by many *Arawak* tribes. The *Chané* and *Chiriguano* masked characters collect food and depart amid the tears of old people.

MYTHOLOGY AND FOLKLORE

Cosmogony.—The Sun is a man and the Moon is his wife. In the evening the Sun enters a river which he follows until he rises again. An eclipse of the Sun or of the Moon is caused by the attack of a "purple" or "yellow" jaguar. Everybody then makes as much noise as possible to frighten off the celestial feline.

The appearance of the Pleiades, which the *Chiriguano* call "a swarm of bees," announces the harvest season. Their yearly course serves also to reckon time. The *Chiriguano* identify Scorpio with a fenced field, in the center of which is the miraculous spade of Aguara-tunpa. In the black skies near the Milky Way (the road of the rhea), they see a celestial ostrich (rhea), the head of which is the Southern Cross. The Magellanic Clouds are the ashes of a fire built by a couple who went to the sky. (See Lehmann-Nitsche, 1924.)

Folklore.—Most of the *Chiriguano* folklore recorded by Nordenskiöld (1912) was obtained from a *Chané* of the Parapeti River region. The collection of myths and tales made by Métraux (1930 b) in *Chiriguano* villages shows that both groups, in spite of their different origin, share substantially in the same folklore. Certain motifs in the *Chané* version, however, have not been recorded among their ancient *Chiriguano* masters, and may well be *Arawak* traditions which have survived among them. An example is the theme, which is well known in the Guianas, of the

/68 cont./

126 712 covering an area of about 2,000 meters; it ends in a hill surrounded by the same foundations. It had its lookout and a small plaza and dominated the whole area.

172 712 These fortifications have stone foundations, are made artfully, and are very large; consequently it is not credible that they might have been built by Indians who were even less civilized than the present ones. I believe, rather, that it was the work of the conquistadors, who, following the example of Columbus, Cortez, and Pizarro, built them for protection from the Chiriguano arrow; the extent of these walls and the height of the lookouts do not suggest anything 173 else. The old men add that when they were pursued some 648 of them hid in the mountains out of fear or because they were tired and that these then populated the region (3).

3. This must refer to what Father Cardús says about the time when the Cruceños /people of Santa Cruz/ settled at the place which today is occupied by the city of Santa Cruz de la Sierra.

• 174 /69/ From what has been expounded it can be deduced that the Chiriguano race is most probably of Paraguayan origin; the inhabitants of that region also say this to those who annually go to work in the haciendas of the Argentine Republic and to the Indians who in past years went to Corumbá from Yvu, Caipipendi, and Parapiti. For example, they told them that they knew of the existence of a place named Yvu and of another called Parapiti, frequented by their grandparents who had formerly visited their relatives, the Chiriguano. In addition there is a tradition that in a not too distant time many families settled thereabouts traveled from time to time to visit their relatives who lived on the banks of the Paraguay River.

/39-cont./

194 199 In support of the aforesaid is the language, which differs little from Guaraní, spoken in the Republic of Paraguay, in various parts of Brazil, and even in Corrientes, and language is an irrefutable argument for one or more nations, but inasmuch as this language is very reduced in the latter places, and it was general in the former (Paraguay) until a rather recent period, it might well be concluded that the Chiriguano originated in Paraguay.

648 999 This Nation is attempting in our times to enlarge or extend its domain into the territories occupied by the Chiriguano, especially as far as degree 22, where almost all of the missions are located, including those of Parapiti Grande, which are located at 19° 58' latitude south of the meridian of Paris. Bolivian diplomacy has powerful arguments to uphold its rights, with the support of the missions, principally those of Parapiti, whose first founding goes back to the eighteenth century. The Franciscan Father Narciso Llamedo built there a moral and a physical edifice, whose vestiges can still be seen today, by authority of the Most Illustrious Archbishop of Chuquisaca and supported by the Royal Audiencia of Charcas. Neither the Chiriguano language nor the invasion of this race gives any right to Paraguay, because all authors and explorers are in agreement that this race did not exist here before the thirteenth century. In the fifteenth century the Chiriguano were visited by the Inca Yupanqui with a large force of men from Cuzco. Later, in the sixteenth century, the resident viceroy of Lima vainly attempted to humiliate the pride of this race, and finally everyone sees that the Bolivian Nation has exercised full authority here since before and after the war of Independence, and that the missions have progressed and are progressing in the shadow of the Bolivian flag, which has always waved in these remote lands.

194 Someone might observe and say: Why, when the Chiriguano /70/ emigrated from Paraguay, did they not settle on the banks of the Pilcomayo and on the immense pampas of the Gran Chaco? At first glance this question constitutes a grave embarrassment to one who does not know the race, but it is easy to answer it satisfactorily. All barbarous tribes remain in

/70 cont./

174 idleness and laziness and in indolence and are content with what nature provides for them to live on and subsist; this is the practice of the savages to the north of Santa Cruz, thus the Toba, Mataco, Choriti, and others who do not bother with planting and are content with only hunting, fishing, roots, and wild fruits, which, when they begin to turn yellow, are greeted by the Toba and Mataco with the "Pimpin," a kind of small drum, so that they may mature faster and better.

174 241 311 But the Chiriguano, in spite of being indolent, a recent émigré, like his neighbors, is not so much so as the other tribes, since he joined the Carious. In addition to liking to fish and hunt, he does not fail to make his plantings of maize on a large scale, where he uses his energies in order to profit from his sweat later by converting it into "Atipíi," parched maize, "Atiruru," mote or boiled maize, "Aticúi," meal, "Muyape," bread, "Cangüi," or chicha, etc., dishes that the Toba and others know only in the house or larder of the Chiriguano. In order to obtain this class of foodstuffs, the banks of the Pilcomayo were not sufficient for a very large tribe; in addition, the other tribes which were hidden in the woods along that stretch must have devastated their fields, or their owners must have been in a continual state of uneasiness. Neither could they have obtained it on the pampas of the Gran Chaco, because the cooling action of the rains is scarce there, and, moreover, the soil in many places is like an immense sieve because of the holes made by the quiriquinchos /armadillos/, balled armadillos, and others of the species, which nest there and have built their subterranean towns (1).

1. The Toba began to plant maize and beans when they came under the control of the Franciscan fathers at the San Francisco dey Pilcomayo Mission, now Villamontes; today they plant very little.

/70 cont./

174 241 311 Consequently it was very natural that the race which was emigrating from Paraguay should seek out for its needs better lands which would permit it to make good use of its natural inclination to cultivate "Abati," maize, "Güindaca," gourds, and "Cumanda," beans, because from the names that they give to all of these vegetables, it can be deduced that they did not get to know them after the discovery of America, but long before; and the same is true for the domestic animals, "Yaimba," dog, "Uru," /71/ chicken, "Minta," cat. What is certain is that the Chiriguano race has been distinguished and is distinguished from the others which still remain in the savage state, and the Toba, as well as the Mataco and the Choroti, regard the Chiriguano as nobles and masters, and they serve them in exchange for maize and other things, and there has never been a natural marriage involving a Chiriguano man or woman with the tribes named (1).

174 648 563

1. The Toba are more intelligent and more easily reduced than the Mataco; the latter were also exposed to the missionaries of San Antonio del Pilcomayo, located on its right bank.

The Toba have generally assisted their masters in wars and have lived for long periods among them, especially in the time of good and abundant crops. They did this before the missionaries opened Cuevo and Ivo to trade with the founding of the Santa Rosa and San Buenaventura missions, and they still do in the Franciscan missions of Machareti, Tigüipa, and Tariari, because they are near these tribes.

174 169 The places that the Chiriguano selected for their residence after the migration were the mountainous one and the one visited by frequent rains, necessary so as not to lose the fruit of their labor, and in fact we do not see this race settled in places away from the mountain range, nor in impenetrable forest, good only for those tribes in a state of

/71 cont./
174 complete savagery (2).
167

2. Cayuguari, with some 30 Chiriguano, went to the desert to live among the savages to the east of Carandaiti.

174 In addition to Chiriguano tradition and the fable of the
175 Aguara-Tunpa, from which we understand that the race with
167 which I am dealing originated in Paraguay, there are ecclesiastical and secular authors who support my opinion. Among the first stand out the Franciscan missionaries Cardús and Martarelli, and the most eminent among them is the Most Reverend Father Corrado, who in his history of the school and missions of Tarija asserts that the most probable opinion is that the Chiriguano came from Paraguay, despite the fact that the Guaraní language is scattered through many parts of Brazil and some parts of the Argentine Republic, since, as we have just finished saying, language is a powerful argument in learning about the origin of a tribe, and it has already been said that Guaraní is generally spoken in Paraguay, so much so that it would not be an error to say /72/ that the Guaraní have gone to Brazil and to Argentina from the same Nation (1).

1. In the chapter "Religion and Beliefs" I shall discuss the fable of Aguara Tunpa more fully.

175 Among the secular authors we have the famous d'Orbigny. According to him, before the discovery of America by the immortal Genoese, the Chiriguano occupied the last ramifications of the Bolivian Andes, lived completely naked, were
080 cannibals, and were of Guaraní origin (2). The Inca Yupanqui

[567]
[266] 2. The Indians of Parapiti told me that the Tapii natives were their slaves, and that in the uprisings of the latter they ate their ringleaders and others.

175 248 /72 cont./ The Inca Yupanqui promoted many wars against the Chiriguano with the intention [175] of conquering them for the Inca civilization, but his efforts were in vain because his army was always conquered by the ferocity of the Chiriguano, who also had in his favor the fact that this was his own land and as a result he knew it well enough to be able to play tricks on the Inca militia with ease.

It seems that the Incas in their insistence on civilizing the Chiriguano brought their armies to the frontier of Cordillera Province. In fact there exists along the top of the range which divides this province from that of Acero and from Sapirangui Canton a fortress of great size, all of it made out of well-set stones, called "Incahuasi," "house of the Inca," and gives this name to the whole range, whose elevation to the south was set up by the law of interdepartmental demarcation as the boundary between Santa Cruz and Chuquisaca, when in the year 1898, the law of settlement was negotiated.

[192] Inca-huasi is a compound word of the Quichua /Quechua/ language; the Chiriguano language does not even have a word which resembles it; it is thus very probable that that fort was built by the Quechua and that, inasmuch as the forces were personally directed by the Inca, he should have ordered houses to be built along the whole top of the range, as can still be seen today (3).

3. The road from Carapariçito to Monteagudo through Incahuasi is not an old one. Don Octavio Padilla had it opened.

• 174 195 169 It is also a verified historical fact that after the discovery of Brazil and other regions of South America, 4,000 Indians fled from Paraguay, because in the many wars which they had waged against the Portuguese, they had killed the leader. Fearing general destruction, they came into Bolivia along the banks of the Pilcomayo River; in the Gran Chaco they found the region near the cordilleras occupied and inhabited by the ferocious Chiriguano. /illustration appears here/ /73/ but since they could easily make themselves

[Text continues on p. 105]

174 /73 cont./
175 understood, because they spoke the same language with slight
167 differences, they joined them, and from that moment the number of the Chiriguano was increased (1).

1. These 4,000 Indians were not of the Guaraní race; they had gone to settle in Paraguay and had learned that language imperfectly; they were called Carius and had killed Captain García.

The 4,000 Indians who fled from Paraguay because of the continual relations that they had had with the Portuguese had, at the time when they formed an alliance with the Chiriguano, a slight tincture of superficial civilization, just as in Mexico the Indians of Tlaxcala had learned it from Hernán Cortes and other Spaniards. As a result of this trace of civilization they had begun to use some clothing to cover, in principle, the most delicate part of the body; they had stopped eating the flesh of their enemies and prisoners and were more humanitarian in their dealings.

[266] [191] Having established their abode and formed a single tribe with the Chiriguano, they introduced their kind and humanitarian customs among their ferocious friends, who softened slightly their haughtiness and pride, imitated their allies in the manner of dress, and began to abandon the barbarous custom of cannibalism, because of which they are distinguished today, and even for a long time before, from the Toba, Mataco, Tapiete, and Sirionó (2).

[197] 2. The Tapiete speak the Chiriguano language with a certain difference, and the Sirionó, it is believed, were ancient Chiriguano, because their language is somewhat similar.

175 [161] The Chiriguano, thus united, continued to multiply much more and to extend their dominions into the different departments of the Audiencia, the possession of which they now had in lesser degree. Before a century had passed after the

/75 cont./

175 founded various missions, and today what is not in the hands
177 of the respective diocesan authority is all in the power of the latter group, who have irrigated this soil with the sweat of their labors for centuries (1).

1. The Jesuit Father Pons made efforts to found missions in the stretch between the Pilcomayo and Parapiti, with whose Indians he began to speak, but he was unable to do anything. This was done in the first half of the seventeenth century.

● 174 There is no doubt about the Paraguayan origin of the
167 Chiriguano native, as there is none about that of the Guarayo, whose language is the brother of the former's, despite the fact that they do not understand each other well, owing to the great variations which both have undergone. Paraguay is southeast of Bolivia and the region occupied by the Chiriguano tribe northwest of the former, with the Gran Chaco being the extensive region which separates the two republics of Paraguay and Bolivia. The domicile of the Chiriguano in the Gran Chaco is another circumstance which weighs heavily in indicating the Paraguayan origin of the tribe.

All that remains is to know the route which the Chiriguano followed in their migration to Bolivia; it might have been done in a straight line, crossing the Gran Chaco, which distance from the last cordillera west of Parapiti and Charagua to Paraguay is scarcely 100 leagues, but this route offers the insuperable obstacle of lacking the most important element for life, water. This has clearly been demonstrated by the calamities suffered by the various expeditions organized by the Bolivian government for the purpose of opening a straight road to Paraguay by setting out from Iscso (2).

2. The explorer Francés Thouar, after having gone over the route opened by the Arana, had to retreat because of lack of water and in a rash slip became lost and, with several others, nearly perished from hunger and thirst.

/75 cont./

194
169 They could have emigrated from their land of residence and followed the course of the Paraguay River on its right bank, arriving at Curumbá, and then across the salt flats of San José, coming to the places which they occupy today, but the stretch is longer, the water to be found is scarce, and over great stretches there is no trace of anything which /76/ might verify their emigration over this route, if indeed they would not have been attacked en route by the numerous nomads thereabouts.

[133
[364] It is necessary to conclude that they followed the banks of the Pilcomayo River; this rapid stream starts in the interior of the Bolivian Republic, crosses through the entire Chiriguano region, and empties into the Paraguay; its banks from near Azurduy up to Villa Montes is a straight line of more than 50 leagues, all populated by Indians who are clearly Chiriguano. From Villa Montes to Guachalla near the Esteros del Padre Patiño there are Choroti and Tapiete, who, with slight differences, speak the Chiriguano language; this stretch has plenty of water, fish, and fruit and is shorter than the above-mentioned one. Dr. Campos followed the banks of this river in order to arrive in Paraguay; Colonel Rivas, the Frenchman Crevaux, and the Spaniard Ibarreta followed the Pilcomayo River on their expeditions; they failed not through a lack of food or water, but some because they felt sure of the goodness of the Indians, and others because they had a very small force with them. All of these circumstances clearly show that the Chiriguano must have come into Bolivia along the banks of the Pilcomayo; the tribes along the way could not have offered them much difficulty, because their number was extraordinary; hardship on the travel rations was so insignificant that it allowed them to fight with vigor and bravery, and finally their attitude was peaceful (1).

1. Colonel Rivas and the Frenchman Crevaux were killed by the Toba, and Ibarreta by other Indians.

/76 cont./

When experience showed them that they could settle in the regions which they occupy today because the harvests were certain, they made their homes there and, when invaded, defended the territory at all costs, as has been seen. The region, as was seen in the first chapter, is certainly very fertile: when it is irrigated by rain, it produces every type of cereal: maize matures exuberantly, and the crops are splendid with little labor. If the fields are kept free of weeds with a couple of weeding hooks and there is no lack of rain, the Chiriguano can sing all year around the big chicha bowl in the company of his friends.

But if rain is scarce, the crops are generally lost, and then the Chiriguano suffers, digs roots for his food, and sells everything he has, even his trousers and his wife's new tipoy, in order to support his poor family miserably. In times of scarcity the Indian plants with considerable hope a small patch where it is damp, such as around a lake or /77/ along some stream: plantings of this type are called socorro /succor/, and in fact they are, when roots can scarcely be found. Oh a few green gourd leaves at this time are like syrup in the Chiriguano's mouth! Poor Indian!

Language

By what has already been related it can easily be understood that the Chiriguano are descendants of the Guaraní of Paraguay: thus the Chiriguano language is very analogous to Guaraní, as well as the Guarayo language, and it can be stated as a fact that both the Guarayo and the Chiriguano languages have the same relationship to Guaraní as that which exists among the Spanish, French, and Italian languages with respect to the Latin language, which is their mother (1).

1. The Chiriguano language has very few accented words: in Guaraní they are abundant. For example, "abati," maize,

4: Nino--184 M-3 (1690-1911) .917 SF10 Chiriguano SF.0

/135 cont./

because the Indians know that the evil spirit is a phantom, and the soul of the dead a shade: chemembi iñ abecha. I saw the shade of my son, says the mother.

One night while the smallpox epidemic was going on, they called me, being the Convevor of the Santa Rosa Mission, to catechize a poor and miserable old woman who was some two and a half kilometers from the town. Among those who accompanied me there was one whom I well remember, who is still alive and whose name I shall not forget, who carried a burning fire-brand, which was not necessary for me because the night was quite bright. When he was asked the reason fig such a thing, he answered: Aña aiuguae vaeno, to chase away the demons. They all do this especially when they are alone, which is rare, because the Chiriguano only rarely goes out at night because of his fear of evil spirits.

From this it can be deduced with considerable probability that the Chiriguano are descendants of the Guaraní of Paraguay. There were in that region, in past centuries, the missionaries of the Company of Jesus, who are famous for their apostolic work and for the suffering which they experienced in the reduction of the region. Because of the sorcerers some of them even suffered martyrdom.

I had the opportunity to read a brief history, which I have mentioned above, written by Father Ammnio of this same company, and I learned that the Guaraní believe in sorcerers and saw the Aña, demon, at all times and places. It destroyed the wheat-fields and other plantings, did damage in their houses and burned them. Even the Guaraní called the bad spirit Aña which the said missionary applies to the demon (?).

2. A work written in the Guaraní missions of Paraguay.

4z Nino--169 M-3 (1910-1911) 1912 SP10 Chiriguano SP10

/138 cont./

993 the disobedience that was his sin, and the confusion which the guilt caused in him, with its consequent reprobation (1).

> 1. This story lacks the promise of a Savior, a most important fact, to be sure, but it should be kept in mind that this is a centuries-old tradition. The Indian is ignorant and only sees material things.

It can clearly be seen that this account, with only a slight difference, follows the story told by Moses in the first chapters of the Bible and adds even more to the proof that the inhabitants of the Americas came from and are descendants of the first man, a fact which so many enemies of Religion make efforts to deny. It also proves the unity of our race or species against Darwin, who would have it descend through evolution until it is related to the orangutan (2).

> 2. Hernán Cortés visited the Emperor Moctezuma during his first visit to Mexico. The latter assured him that they descended from other very ancient men, similar to the Spaniards, whom they called brothers.

It is easy to see that the Chiriguano tradition just related has been altered slightly, and that they attribute the reconstruction of the race to it, which, according to the Bible, is in fact the creation or formation of the first man. Centuries have passed since the universal flood and even more since the creation of the [212] first man. The Chiriguano race is ignorant, has no books, no [179] writing. It is descended from the Guaraní, who always lived apart from civilization. It could never be subjugated by the Incas, and thus it is not strange that the said tradition regarding creation might have changed until it is believed to be a second creation. Instead it is strange that /139/ up to now it has been preserved so clearly and with so few differences. I confess that when I first heard it I could not but be surprised and amazed, and I present it for the consideration of my readers just as I heard it.

S:Nordenskiöld E-5,1(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8
South American Indians
53

Pampas in which the corn is stored to protect it from hares.

The above-mentioned village and barns I have, therefore, left out of my map. PATER SCHMIDT[1]) mentions pile-buildings from other tribes too.

FRIEDERICI[2]) has also collected numerous statements referring to the occurrence of pile-dwellings in S. America from the works of older writers.

The table 1 and map 1 which follow show the distribution of pile-buildings in S. America according to LEHMANN, FRIEDERICI and PATER SCHMIDT, together with some additions and corrections.

On the accompanying map I have merely indicated those which seem certainly to be of Indian origin. Those mentioned at the end of the 15th century, as well as those from the 16th are so undoubtedly. I am convinced that the pile-buildings of the Chané and Chiriguano are genuinely Indian, as nowhere in this region do the Whites possess such barns. Their geographical distribution leads us to presume their genuinely Indian origin, as also that they are a culture-element which came to these Indians from the swamps of Mojos, and that they here are an Arawak culture-element too. The use of pile-buildings on hard ground is quite comprehensible to me, as they offer great advantages, whether used for barns or dwelling-houses. The idea must have come, however, from some marshy tract or from a sea-coast where the inhabitants were dependent on ebb and flood tides. In the cases where a people employ pile-buildings on hard ground which is not liable to floods, it is due, as a rule, to conservative ideas — the mode of building to which they were accustomed in their former dwelling-places has become indispensable.

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[1]) P. 1004.
[2]) (5) P. 98.

5:Nordenskiöld E-5,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

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*171
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do not even spin. It must, above all, have been the Tupi - Guarani. They are known for their manufacture of cotton hammocks. The Omagua who dwell (have dwelt?) in a tract where they and the Cocama are the only Tupi Indians, use hammocks both of palm-fibre and of cotton. All the neighbouring tribes have nothing but palm-fibre hammocks. Some Tupi at the Upper Xingú use palm-fibre hammocks with a woof of cotton. RUTH HAEBLER mentions two hammocks of bast from the Cainguá. Otherwise, the Tupi tribes use cotton hammocks, as has been pointed out by PATER SCHMIDT. The Caribs, too, have undoubtedly contributed to the spread of cotton-growing and the use of cotton hammocks, for it is very evident that in Guiana especially, they have used, and still use, cotton in their hammocks far more than the Arawaks. The distribution of cotton hammocks in S. America cannot be properly understood except in connection with the general history of the cultivation of cotton. It is highly probable that it was from the western area of civilization in S. America that the knowledge of cotton-growing spread over a considerable part of the continent. It is very likely that, in post-Columbian times, the practice of growing cotton has spread to a good many tribes who formerly were ignorant of it. We must remember that cotton has been grown at such mission-stations as in Mojos on a very large scale.

C
Ce
[174]

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It must also be remembered that the history of the cultivation of cotton is of especial interest, because the cotton bush is one of the few cultivated plants that in pre-Columbian time were common to both the Old and New World. Consequently, it would be very interesting if we could prove that cotton was first used in S. America within the old culture areas, and there only after the Indians had reached a comparatively high state of civilization.

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It is not quite right to say that the hammock was not used within the culture-area of the west. It was used — not as a bed, but as a litter for persons of rank. This is

SvNordenskiöld E-5,4(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

XIII.

Toilet-Articles, Tattooing etc.

Ee 525 *171 ●174

The Chiriguano and the Chané are careful of their personal appearance. They are cleanly people, much cleaner than their neighbours. If these tribes had emigrated from the cold Bolivian mountains into their present territory, part of which is very poorly watered, they certainly would not bathe once, or even several times a day, as they do, but would be as dirty as the Quichua and the Aymara, who are, incredibly filthy. Their Chaco neighbours, too, the Mataco are also extremely dirty. In the parts I have explored it is only in Mojos that we find Indians as cleanly as the Chiriguano and Chané, these being the Mojo and the Baure, kindred tribes of the Chané. On the other hand the Guarani Indians in North Bolivia, the Guarayú, are less clean, even if they are among the »clean ones». The Guarani in Paraguay are, however, said to be very cleanly. The cleanliness of the Chiriguano and the Chané is a positive proof that they migrated to the territory now inhabited by them from warmer and well-watered parts, where bathing was pleasant and easily accessible. The Chiriguano and the Chané have not learnt to bathe from the Mestizos or the Whites, whose habits are anything but clean in these parts. Cleanliness is certainly not a virtue suddenly acquired by any people, but may indeed be regarded as a race-peculiarity. A map of S. American cleanliness would most certainly enlighten us on several points of interest with regard to the origin of the tribes. Now, when I read that the Mundrucú are very dirty I am sceptical of their being Guarani-Indians, and consider it much more likely that they are naturalized Guarani of a different origin. I shall not venture to give a map of S. American cleanliness

Ee [128]

5:Nordenskiöld E-5, 4(1908-1909. 1913) 1920
SF10 Chiriguano SF10
Chane SF8
Aymara SF5

here. In order to do so, it would be necessary for me to have seen much more of S. American Indians than is the case. I will, however, here try to give the tribes I know a *certificate of cleanliness*. I mark the dirtiest, the Aymara, with 0 and Mojo, the cleanest, with 5. At the same time I will give them a certificate of orderliness, i. e. point out to what extent they keep their huts tidy and their belongings clean and neat. These 'certificates' are also of considerable interest as a means of understanding the cultural development and relations of the tribes.

I consider that a distinction should be made between the Chané who live on the Rio Itiyuro and those living on the Rio Parapiti. The former are poorer and characteristically enough less cleanly than the latter. It is of a certain interest to see that skill in arts does not always go hand in hand with tidiness and cleanliness.

The more or less high standard of Indian art, at least among present-day tribes in E. Bolivia, is dependent on whether they have been influenced to a greater or less degree by pre-Columbian civilization in western S. America.

Nordenskiöld E-B 4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8

the ornamental design not always so (fig. 26). It is difficult to decide whether the idea of the pincer as a mere breast ornament is due only to the influence of non-Indian smiths or not. Most likely the pincer was turned into mere ornament by the makers, who presumably used it as an article of barter and then increased its size in order to make it more and more coveted by the Indians. At last the makers themselves may even have been quite ignorant of its original use. Consequently we cannot be wrong in considering the »boivéra» an original Indian element of culture which has been transformed under the influence of

Fig. 27. Figure tattooed on the arm of a old Chiriguano Indian. ! Caipipendi. $^1/_1$.

the Whites. There is no doubt that the pincer is a cultural element derived from the old culture zone in the west. They are, as we know, quite common in collections from that part. The Chiriguano also sometimes use a piece of split reed for removing hair.

Tattooing occurs here, but is very rarely seen. I have only seen two Chiriguano women and one old Chiriguano man with tattooing on their arms. The old man had the figure depicted here (fig. 27) tattooed on his arm. If I understood him rightly, it used in old times to be quite common for the Chiriguano-men to be tattooed in the same way. I have seen no tattooed Chané men or Chané women. I have already given an account of the distribution of tattooing in S. America in the first part of this book.

S:Nordenskiöld E-5,4(1908-1909, 1913) 1920
SF10 Chiriguano SF10

302 276 *171 ed with coca. The teeth of the Paez were also blackened by coca-chewing. Most likely this holds good of the Goajiro too. We ought, therefore, to distinguish between two regions, viz., one where the Indians get black teeth by chewing coca-leaves with lime, and another where they purposely stain their teeth blue or black. The latter must be renewed after a time. the former, which is the result of coca-chewing with lime, lasts for life.

302 / 174 *171 It is difficult to explain the geographical distribution of the custom of staining the teeth. Perhaps the unintentional staining of the teeth is the original one, and has given rise to the intentional staining. One might suppose that the Indians who saw the »nice», black teeth of the coca-chewers wanted to appropriate the fashion, though they were not coca-chewers themselves, and consequently they stained their teeth dark.

That coca-chewers in Cumaná considered it elegant to have black teeth is obvious from what MARTYR says: »They contemptuously call the Spaniards »women and children» because the latter like to have white teeth.» »Women» is not exactly a title of honour among Indians.

One might imagine that staining the teeth was once fashionable within the civilized area of the Andes and that the custom has lived on in the border land after it dropped out of fashion in the place from which it originated. Staining the teeth is not a Guarani custom, so it must have [177] been only when the Chiriguano Indians reached their present place of abode that they learnt the custom.

It may also be assumed that the coca used to be chewed with lime all over the old civilized western area. If this is so, we ought to be able to prove it archaeologically, but, as far as I know, none of the skulls found in Peru or Bolivia have had teeth blackened and destroyed by using lime with the coca.

It is, however, a striking fact that intentional blackening of the teeth does not occur far from the Andine region

5:Nordenskiöld E-5, 4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10

of civilization. This, at any rate, appears from the quotations here given; nor is it likely that blackening of the teeth in early post-Columbian times had a much greater distribution than is here indicated. I venture to affirm this, since blackening of the teeth is one of those practices which would strike all travellers even from the time of the Conquest. Respecting such practices as have interested older writers we ought to be able to make very exact maps of their post-Columbian geographical distribution.

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5tNordenskiöld E-5,7(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians S3

S 534 174 tions — should have occurred within the Amazon basin, and not within the areas of civilization in the west and north-west, if it really were pre-Columbian.

S 174 439 534 By means of far-reaching trade connections it is certain that European and, possibly, African ideas were spread far and wide at the beginning of the Conquest period. *Within a large part of America the continuity between the tribes was at that time, still undisturbed.* When the Whites had completed the conquest of all the great highways — the navigable rivers — trade among the Indians ceased or was at least diminished. The wide extent of inter-Indian trade already appears from the fact that the Indians of the upper Amazon in the seventeenth century obtained axes and knives of iron from Guiana[1]). This proves that Indian trade was carried on over immense distances. Thanks to this trade there were also spread, of course, many purely Indian ideas. Where large tracts are occupied by Indians, trade is still very lively, as in Guiana, along the upper Orinoco and in the Chaco. Only a short time ago Indians appear to have carried on a trade in weapons between Guiana and Rio Negro.[2])

S 174 534 177 In what I have now said I do not consider that I have proved finally that the side-blown trumpet in S America is an African culture-element. I have however demonstrated that is highly possible, and that the question deserves attention.

C Ce 534 ● 174 177 The information I give below, which is based on the literature on the subject and on Museum specimens to which I have had access, indicates my knowledge of the occurrence of trumpets in S. America. Thus it verifies Map 10. The end-blown trumpet may have been obtained by the Chiriguano and Chané from the western area of civilization. In this case the original trumpets must have been of some

[text continues on p. 126]

[1]) Manuel Rodriguez Lib. 2, Cap. XI, P. 131.
[2]) Koch-Grünberg (7).

5:Nordenskiöld E-5/(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8

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other material than the cowhorns introduced by the Whites, e. g. of calabashes, like the old trumpet from Caipipendi. Mouthpieces with lips were presumably, as I said, introduced by the Whites. COMINGES[1]) relates the following little episode which is significant as showing how the Indians learn the use of musical instruments from the Whites. »Á su vista se me occurió la idea de fabricarles un clarinete, lo que hice en pocos minutos con una caña tacuara, del que se arrancaron notas muy agudas parecidos á las que produce la dulzaina; lo que alegró tanto á la concurrencia que hasta los viejos me metían cañas por los ojos bara que les hiciese gaitas, en cuya operación me pasé el resto de la tarde y parte de la noche.»

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The panpipe is very rare here. It consists of four reeds which I have not seen bound together. In the following table and in the accompanying map 11 I have endeavoured, on the basis of the investigations of PATER SCHMIDT, some other writers, and of myself, to indicate the distribution of the panpipe in S. America. The map does not enlighten us as to whether the Chané got the panpipe from the area of civilization in the west, or if it came to them from Indians in N. E. Bolivia. The latter seems the likeliest supposition, as it only occurs within the northern part of the Chané country. It is not a culture-element from Guarani Indians. It is interesting to notice that the panpipe has by no means so great a distribution at it might have. In the Chaco there is abundance of material for panpipes, but they are unknown there. In the wealth of old literature dealing with the Indians on the coast of Brazil, I have found no hints of the panpipe. Oddly enough the panpipe is also unknown among the Indians of the Roraima region. Nor is the panpipe known to the Cainguá Indians. Very possibly the distribution of the panpipe has been considerably extended in post-Columbian times. The well-known investi-

[1]) P. 227

S:Nordenskiöld E-5,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8

Neither the Chiriguano nor Chané have carrying-baskets. They have carrying-nets instead.

In Part I I related how, in the year 1909, I came with some Guarayú Indians to the Chané and Chiriguano country. As there was no palm with parapinnate leaves, they were unable to make themselves new carrying-baskets instead of their old ones which were worn out. Should their tribe, for any reason, be compelled to emigrate to the Chiriguano and Chané country, they must alter their type of carrying-basket. It is quite possible that something similar has befallen the Chiriguano and Chané. They did not find suitable material for basket-making and so they learnt from the original inhabitants to make and use carrying-nets. Of the carrying-nets used by neighbouring tribes, those used by the Chiriguano and Chané most resemble those found among the Yuracáre.

In N. E. Bolivia, where palms abound, the Indians often make baskets for occasional use of a single palm-leaf. The whole basket thus consists of one palm-leaf. MAX SCHMIDT has given a minute description of such baskets. They occur among the Chané on the lower Rio Parapiti and, more rarely, among the Chiriguano. It is, at present, impossible to define the distribution of such baskets, since the majority of explorers have paid them no attention. There is a considerable difference of make in different places. In my collections I possess such baskets from the Chimáne, Ixiama, Cavina, Huanyam, Itonama, Pauserna, Churápa, Yuracáre, Siriono, Guarayú and Chacobo, as well as from the Chané and Chiriguano. It can be said that, practically speaking, they were used by all the Indians whose acquaintance I made on my travels excepting the Choroti, Ashluslay, Toba, Tapiete, Mataco, Quichua and Aymara.

The »Urupé» is a type of basket which I have already dealt with in the foregoing, and I beg to refer to what I said there.

Nordenskiöld E-8,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

The influence of the Mountain culture has extended considerably further east than the territory of the Chiriguano and Chané. In the First Part of this work I showed what a great influence this culture had on the Choroti, Ashluslay, Lengua, Mbayá, and other tribes. The Guarani-Tupi Indians in the most easterly part of S. America have even been influenced by it. The influence of the Mountain culture east of the Andes has probably been considerable not only under the Incas, but also at earlier epochs. But this is difficult to substantiate, with the paucity of distribution maps at present drawn up. I would ascribe to it certain cultural elements such as urn-burial and the shape of the labret among the Chiriguano. If this assumption is correct, these cultural elements must first have been conveyed eastward from the culture zone in the west, and then have been brought westward again by the migrations of the Chiriguano Indians. Both are here evidently original to Chiriguano and not to Chané.

The influence of the bronze age culture on tribes with a lower civilization must have been quite different from that of the Whites. And yet the culture of the more highly civilized Indians consisted of the same elements as that of the more primitive Indians. The Chané and Chiriguano have therefore not only learnt the use of a number of things from the bronze age culture, but have also learnt to make them themselves. Among these more primitive Indians domestic industry has evidently progressed under the influence of the Mountain culture, but is perishing under the influence of the Whites.

As I pointed out in Part I, the bronze age culture in the west was a great attraction for the Indians east of the Andes. It was in order to pillage the rich districts in the west that the Chiriguano migrated to those parts at the beginning of the 16th century. It must have been in order to facilitate the establishment of intercourse with the opulent culture of the bronze age that the Arawaks (i. e., the

[text continues on p. 206]

8:Nordenskiöld E-8,γ(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

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Chané) wandered south along the Andes to parts where no dense primeval forests hampered communications. This is always on the presumption that they were not forced southward by other tribes, which may possibly have been the case.

The question may naturally suggest itself, 'How was it possible for the Chiriguano, if they did not establish themselves in their present habitat until the beginning of the 16th century, to have learnt so much from the bronze age culture in the west, which began to decay a few years later?' They did not do so by direct intercourse with this culture, but learnt it from the original inhabitants of those districts, who were for a long time under the influence of that culture. The Chiriguano conquerors were presumably very few in number, compared with the original inhabitatants, who most likely had long been under the influence of the bronze age culture. The conquerors adopted the culture of the original inhabitants, these the language of the conquerors.

The pottery of the Chiriguano and Chané is evidently an offshoot of the Mountain culture, their textile industry has been strongly influenced by it. The most important domestic industries of these Indians are woman's work, and it is probable that kidnapped women have here been the intermediary agents of culture. When the Chiriguano conquered the parts they now occupy, they did so, to a great extent at least, from the Chané.[1]) They then kidnapped a great number of women from these Indians. After being admitted into the tribe, the women taught their skill to their offspring. Being culturally much above their husbands, they would no doubt have a great influence on them.

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[1]) See NORDENSKIÖLD (13).

StNordenskiöld E-5,½(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8

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sent work.) It follows that these Indians used other material for their arrows in pre-Columbian days. The Choroti and Ashluslay probably had wooden shafts to their arrows, as Chuchio does not, and probably never did grow in their country. Before *Arundo donax* grew in the Chaco it must have been difficult in many places to find material for flutes, etc. Even in the country of the Chiriguano and Chané there were reeds only in certain parts, so that the introduction of *Arundo donax* may have been of importance for other things than the material for arrows.

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The difficulty of getting suitable material for basket-making has resulted in the baskets being of less importance to the Indians of the district under examination than to the Arawaks and Guarani-tribes elsewhere. Presumably the Chiriguano and Chané used to have carrying-baskets, which were supplanted by carrying-nets of Caraguatá or Yuchan.

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Pile-barns are probably a reminiscence from a time when the Chané lived in swampy parts.

I have already pointed out that the great cleanliness of the Chané and Chiriguano shows that they immigrated to their present habitat from warmer, well-watered parts.

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There are not many cultural elements of which we can say with absolute certainty that they were brought by the Chiriguano, and not by the Chané. Such are, however, urn-burials and »tembeta» of the kind now in use. This is not precluded by the fact that these cultural elements were originally western. Finger-mark ornamention, the wooden mortar, and certain bird-arrows, spindles of the Bakaïri type with a little knob on the top of the stick, are also cultural elements with such a distribution that we can assume that they were originally more intimately connected with the Chiriguano than with the Chané. Further comparative investigations, and access to an extensive quantity of the necessary material will doubtless enable us, from a study of the minor details in the external form of

/173 cont./

Under the influence of the whites, however, the Chané and Chiriguano are gradually changing their huts, and many Indians are already building huts that are identical with theirs.

No hut here has its original Indian form. The genuine Chiriguano huts (the original Chané huts are not known) were very large; up to 100 persons lived in one house, and the entire /174/ village consisted of only a few large huts (1). These

1. Annua de la Compañía de Jesus. -- Tucuman y Perú -- 1596. Relaciones geográficas de Indias. Madrid, 1885. Vol. II. Page CIV.

evidently correspond to the large family houses well known in Brazil, which I saw in Bolivia only among the Chacobo, a Pano tribe from Lago Rojo-Aguado.

Even in Viedma's (2) time, at the end of the eighteenth

2. Viedma: loc. cit.

century. /Fig. 83 appears here/ however, they seem to have given up the original type of house and built smaller huts.

In many villages there belongs to each hut one or more maize granaries (Fig. 84a), in which maize, gourds, etc. are /175/ stored. These granaries are built on piles and are perhaps a reminder of the time when the Chiriguano and Chané lived in swampy regions. To each granary there belongs, as a rule, a ladder (Fig. 84b). Sometimes the granaries and the dwellings are built together into one house. /Fig. 84a appears here./ I saw such huts in the vicinity of Machareti and at Yatavéri, not far from Ivu. Not infrequently the granaries stand in the fields, far from the dwellings.

These villages are neat and clean. Huts and market place are swept daily and the refuse is burned.

The space in the huts is not too cramped. /176/ In each house, as a rule, there lives only one family, which, aside from the rest of the family members, sometimes consists of the husbands

/203 cont./

Cleanliness

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The Chané and Chiriguano are very clean. As has been said, they start the day with a bath and then often bathe several times in the course of the day. This cleanliness is strange among tribes who often live in regions such as, for example, the Caipipendi valley, where a great shortage of water prevails. During the dry season they can never take a bath there, but the

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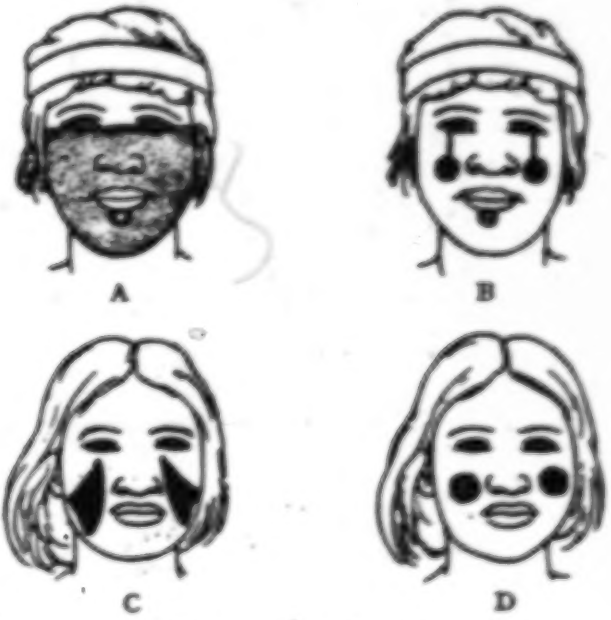

Fig. 197. Facial painting. Chiriguano.
Itapenbia. Red color.
A and B = men. C and D = women.

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women at least wash their bodies thoroughly every morning.

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/204/ The contrast which is evident here in the zeal for cleanliness on the part of the various tribes may be explained, in my opinion, by their migrations. The Choroti, Ashluslay,

6: Nordenskiöld--S7 E-S (1908-1909)1912 SF10 Chiriguano SF 10
Chane SF8

/304 cont./

and Mataco, who still in part dress in fur cloaks, seem to me, like the Fuegians and Patagonians, to have immigrated to the Chaco from the cold pampas in the south where washing was extremely unpleasant, whereas the Chiriguano and Chanê come from the north, out of the warm, humid, virgin forests, from the great rivers, where bathing was always pleasant and refreshing. Now, where /Fig. 109 appears here/ they live under the same climatic conditions, the former have preserved their dirt, the latter their cleanliness.

Im Thurn (1) reports that the Indians in Guiana bathe

1. Im Thurn: Among the Indians of Guiana. London, 1883.

Fig. 108.
Woman's tattooed arm. Chiriguano.
Itapembia.

immediately after eating, without any harm to them. I often observed the same thing here.

The Chiriguano and various Chanê shampoo the head with the seeds of "ayantéra," which they grind. For the same purpose the Chanê on the Rio Parapiti use the bark of the mistol /Zizyphus mistol Griseb./, "yôag." The nails, and /205/ not least the toenails, are also very carefully tended. For combing they use combs carved in wood or made out of sticks of cane tied together.

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even if it has lain fallow for years. Thus, fallow land is also inherited.

Otherwise inheritance is considerably curtailed by the fact that the deceased takes part of his treasures along with him into the grave.

As among the Ashluslay and Choroti, the right of ownership is well developed here too, and the women own what they use and make. As among the aforementioned tribes, generosity is very great here too, even though, thanks to our "civilization" and to the mission, it is less conspicuous.

Chiriguano social life -- we are not familiar with the original Chané social life -- was much more tightly organized than the social life of the Choroti and Ashluslay. The Chiriguano were a conquering people who probably subjugated the Chané and fought bravely and successfully against the Inca, and also resisted the invasion of the whites for a long time. If, instead of the /233/ many chiefs, there had been but a single one, the conquest of the land of the Chiriguano would quite certainly have cost the lives of twice as many whites as now. Unfortunately, in the battles of the whites against the Indians, there were almost always a few chiefs fighting on the side of the enemy against their own tribes. In the last uprising, decided by the battle at Curuyuqui, the whites had an auxiliary force of a couple of thousand Indians, with whom they fought against the fellow-tribesmen of the latter.

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Ca
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Just as everything changes in the life of the Indians when the whites conquer their land, so also are social relations altered. By the time Vocapoy, Maringay, Mandepora, and a few others are lying in clay vessels under the huts, the end will have come; then the Indians will have no laws other than those of the whites, no authorities other than the latter's administrators. The Chané on the Rio Parapiti, as was said, no longer have a high chief.

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Batirayu was offered this position, but he does not wish to be the servant of the whites; he is too proud for that. "It is not as it was in olden times," said Batirayu to the eccentric white man who sought understanding and the confidence of the Indians.

6: Nordenskiöld--128 E-5 (1908-1909) 1912 SF10 Chiriguano SF10
Chané SF8

Ee 539 171

/277 cont./

Part of this legend reminds one very much of a legend from the Yuracáre Indians given by D'Orbigny (1). There "Tiri," who,

Ee [113]

1. D'Orbigny. Voyage dans l'Amérique Méridionale /Journey in South America/. Vol. 3, 1. Paris, 1834, p. 212.

in order to avenge his mother, kills all the felines except the jaguar with the four eyes, who takes refuge with the moon, corresponds to Tatutumpa. In former times the Chiriguano and Chané were undoubtedly in touch with the Yuracáre Indians. When the whites conquered the land around Santa Cruz de la Sierra, the Chiriguano moved south and the Yuracáre to the north. On my last journey I also visited the Yuracáre Indians, whom I shall describe later in another book.

Ee 179 199

Ce 539

The Man Who Married the Daughter of the Thunder God, Chiqueritunpa.

Ce [115]

Told by the Chané Chief Böyra.

In olden times there were once three poor men who had no relatives. They were very hungry. Two of them went forth to look for something to eat. First they came into a large forest through which went a path. /278/ After three days they came to a great plain. In the middle of the plain there was a house. They walked around the house, but found no entrance. Finally, however, a woman came out; it was Chiquéritunpa's sister. She bade them come in. "We are dirty," they said and did not want to go in. She brought maize beer to one of them. He drained four calabash bowls of maize beer. She brought the other one maize beer. He, too, drained four calabash bowls of maize beer. "Go now and bathe," she said, "and wash your heads." She gave them the root of the "yüag" (1).

Ce [139]

1. = mistol /Zizyphus mistol Griseb./.

Chané CF?

The Chiriguano inhabit the part of the Andean region, bordering on the Chaco, that roughly extends from the 18th to the 22nd degree of S. latitude. Within this region there is also found another tribe, viz., the Chané. These two tribes do not occupy each a territory of its own, but Chiriguano as well as Chané villages are found throughout the whole district thus jointly inhabited by them. No enmity exists nowadays between these culturally allied tribes. After the last great Indian rebellion against the whites (in 1890), a small portion of the Chiriguano tribe moved away into the interior of Gran Chaco, where it is believed that they are still remaining.

The western Chiriguano country, in which part the majority of the tribe is living, consists mainly of partly forest-clad mountain ranges, flanking wooded (fig. 187) or grass-grown valleys and small plains. It is a poorly watered country, but it mostly gives good crops, particularly gourd plants and maize. The climate is tropical, but in the higher parts the heat is not especially trying, except during the hottest season.

Although the Chiriguano and the Chané are on much the same level of material culture, they do not, however, belong to the same racial group, the Chiriguano being counted with the Guarani group, whilst the Chané are Arawak. The Chiriguano, according to Matienzo, took possession of their present country in the beginning of the 16th century, when a portion of the original inhabitants emigrated and settled in the Tarija valley.[1] Possibly the subjugated Indians belonged to the Chané tribe. In later times this tribe has adopted the language of the Chiriguano, which is Guarani. Whence the Chiriguano originally came is not known, but it may be taken as probable that, formerly, this tribe inhabited the lower reaches of Rio Paraguai.[2] The name of Chiriguano (quichua), which means »dirt people» was given them by the vainglorious Incas, who despised the Chiriguano people, affecting to look upon them as barbarians. The word »guano» is the name for the well-known bird manure found on the coast of Peru and Chile. It seems however unfair indeed that the Chiriguano, who, in contradistinction to the Puna and Chaco Indians, are scrupulously cleanly, should suffer from such a misleading and discreditable tribal name.

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[1] de Matienzo (1), p. 130. Nordenskiöld (16).
[2] Nordenskiöld (16), p. 158.

342 placed close together and fastened with withies lashed on horizontally (figs. 189 and 190), or of branches woven together and daubed with clay (fig. 191). The roof, the construction of which is apparent from fig. 217, is thatched with grass. This is an especially interesting method of roof-construction, used in Peru already in the pre-Columbian period, a fact plainly evident from an ancient Peruvian vase-painting[1] (fig. 193). The walls and the roof are supported by a hut frame consisting of poles (fig. 217).

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Fig. 188. Part of a Chiriguano village. Two small pile buildings, used as maize-barns and for store between the huts. Distrikt. Mañeca, Prefect. E. c. E.

343 The granaries for storing maize are always built on pile supports
417 (figs. 188 and 191). Fig. 191 shows a step-ladder leaning against a tree.
[322] Step-ladders of this kind, usually hewn out of a single piece of wood, are
[343] used by the Chiriguano as means of access to these pole-supported granaries.

●174 Baron E. Nordenskiöld, who has made a valuable analysis of the distribution
342 of pile-buildings in South America[2], considers that when pile-buildings occur among a tribe inhabiting a region not exposed to inundations, then the idea of constructing buildings raised on piles has generally originated at the time when the tribe inhabited some other region, either a swamp,

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[1] Joyce (1), fig. 73.
[2] Nordenskiöld (18), pp. 3–4.

4/A [see cat. #6, P. 215 -- Analyst]
2/A [see cat. #6, p 195 -- An.]

or a district threatened with flooding through rainfall or the flowing in of the oceanic tide. In my opinion, however, this has usually not been the case.

According to my thinking, it is the fear of predatory animals that has given rise to the pile-construction idea. Those granaries built on pole-supports, that are so commonly met with in widely different countries, have, we know, as a rule been constructed for the express purpose of furnishing protection against noxious animals, such as lesser carnivora, rodents and insects. As an example, the »njalla« of the Lappe is built

Fig. 130. Part of a Chirigwano village. To the right a pile-barn. Inhiti, Bailundu. Photo. E. v. R.

as a protection against wolverines[1], and many of the native tribes of Africa erect their food depositories, or grain bins, on pole-supports to make them safe against mice and white ants.[2] Both the Balenge people, who inhabit a fairly arid country, and the Babisa, who live on the edge of the Bangweolo swamp, build their corn bins on piles.[3] As the Babisa often build their huts on a platform of beaten clay[4] (not piles, it will be noted) as a protection against the annual heavy floodings of the rainy season, this will naturally give rise to the supposition that the Babisa

[1] von Dendera [1], p. 35.
[2] von Rosen [4], pp. 411—412.
[3] von Rosen [4], pp. 339, 340 [fig. A], and 411—412.
[4] von Rosen [4], p. 339 and plate 69 [figs. C and D], also plate 68, fig. D.

[P 196 is blank]

7:Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10

342 granaries, at any rate, are raised on supports in order to keep the stored
343 crop from getting wet. That such is not the case will, however, be
825 apparent from the fact that the granaries are empty during the time of
171 the rains. It should be remembered that, in these parts, the period of
• 174 vegetation coincides with the duration of the rainy season, and that the crops are harvested and stored only after the cessation of the rains. During the time the grain reposes in the granaries no rain falls at all, and on that account the granaries of the Balenge are often unprovided with a roof.[1] Moreover, Babisa, as well as Balenge, stated that the pile-built grain bins were constructed solely as a protection against damage to the corn from rats and white ants. The practice of erecting buildings on piles as a safeguard against flooding is entirely non-existent in the Bangweolo region.

Fig. 193. Ancient Peruvian hut. Vase-painting. After Joyce.

The fundamental idea of storing food in structures built on piles may, in my opinion, be traced back to the custom of primitive peoples of keeping freshly killed meat, and other food, safe from depredation by larger or smaller raiding animals, by suspension on trees. The »njalla», which is erected on a single pole, or on the lopped stem of a growing tree left on its root, may, I think, be taken to be a development of the primitive tree cache. The four-poled Lappish larder called »luopte», or »luove» (cfr. the Swedish words »loft», and »lave»), is on the other hand most probably an imitation of the »hebrä» stores of the land-settled folk, which, presumably, also have received their pile-building construction with a view to forming a protection against noxious animals. For the »hebrä» is probably nothing but a development of the »lave». In order to keep divers implements safe, not only from wild animals, but also from mischievous domestic cattle, such as goats, it is sometimes necessary to construct at the homestead a »lave», the floor of which is either supported by three or four rooted tree-stumps, or by poles driven into the ground (fig. 189). When it is desired to shelter the stored utensils from rain, a roof is built at a suitable height from the floor, and if a still more effective shelter is required, the space between the floor and the roof is filled in with walls. At the stone-age

[1] von Rosen (4), fig. 325.

7:Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10

experiment carried out at Rockelstad in the summer of 1919[1], the» stone-age men» soon found themselves compelled to build a »lave» so that the goats should not damage such foodstuffs and implements as had to be kept outside the hut.[2]

It is my belief that the »lave» has also supplied the idea of building dwelling-houses on pole-supports. Wherever people in a certain stage of civilization have found themselves settled on solid ground, they have had need of raised food-platforms, partly for keeping their foodstuffs safe from damage on the part of domestic as well as noxious animals, partly for the purpose of drying, smoking or roasting the food (see pp. 38, 47 and 48). If such a people, living on the edge of a lake or a swamp, had wished — for defensive purposes or some other reason — to build their dwelling-huts or other buildings in the water, then, if the bottom of the lake afforded good holding for piles, such buildings would have been constructed in the same way as the food-platforms or pole-supported granaries previously employed on firm ground (compare fig. 28 with fig. 115). Where the people in question has been lacking in sufficient skill to construct large pile-buildings in the water, or if the lake bottom was unsuited to this mode of construction, then huts were built on rafts or quagmire islands, after the manner of the swamp dwellers of Alvastra and Bangweolo.[3]

The furnishing of the Chiriguano huts is exceedingly plain. The fire-place, which forms a very necessary heating centre at night during the cold season, consists of a few stones serving as supports for the cooking pots. There is no hole in the roof for letting out the smoke, which has to find its way out through the doorway or through fissures in the walls. As a rule, the food is generally cooked on a fire outside the hut (fig. 189).

Bedsteads of the type seen in fig. 190 are to be found in nearly every hut. These bed frames are made of laths or reeds, and are covered with skins. Nordenskiöld states as his opinion that the idea of these bedsteads has not been borrowed from the civilization of the whites.[4] In the analytical treatise he has written upon this question he adduces conclusive arguments for his opinion, as it seems to me. In Central Africa, one finds bedsteads that are very similar to the Indian ones,[5] and that certainly have not

[1] Klein, pp. 88—89.
[2] Klein (1).
[3] For lake- and marsh dwelling-places in different parts of the world, see Montelius (1).
[4] Nordenskiöld (12), pp. 8—12.
[5] von Rosen (6), p. 403.

7:Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10

of 2.1 cm. It is decorated with one large and many small, turquoise-blue beads made of glass or porcelain.

Necklaces of stone or glass beads are worn by the women, and even men may occasionally be seen with them. One such necklace (fig. 198), which I bought of a Chiriguano Indian in the San Luis district, consists largely of pierced, cylindrical or laminate, turquois beads of exactly the same kind as I found when excavating the ancient site at Tolomosa in the Tarija valley.[1] The Chiriguano keep all stone beads they happen to pick up on the ground, and also acquire them by barter from other districts. Besides turquoise beads, there are also blue, white, and red glass-beads threaded on this necklace, which to me proved a particularly costly bargain. It is probable that such necklaces as wholly or in part are composed of ancient beads are looked upon as amulets. To this question I shall refer later, in connection with my account of the supposed magical properties of certain Choroti objects.

Fig. 198. Necklace of turquoises and glass-beads. Chiriguano. Bolivia. 1/3. Riksm. 03. 3. 905.

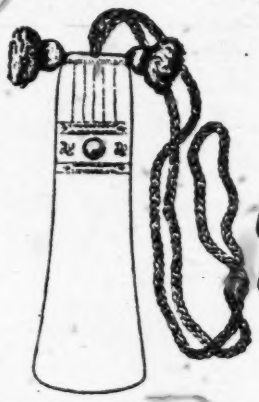

Fig. 199. Tweezer-like breast ornament of silver. Chiriguano. Caipipendi. Bolivia. 1/3. After Erl. Nordenskiöld.

In the important work entitled »Comparative ethnographical studies», Erland Nordenskiöld describes, from the Chiriguano, an interesting breast ornament called »boivéra» (fig. 199), which I have not myself seen in use. It is of silver, doubled over tweezer-fashion, and worn on a string round the neck. Such tweezers, usually ornamented, are nowadays not put to any practical use, but exclusively worn as ornaments. The leaves of these tweezers are, therefore, sometimes hammered together. On good grounds Nordenskiöld advances his opinion that these ornaments originate from the small tweezers, or pincers, that, already in pre-Spanish times, were used by the Andean Indians for removing hairs of the beard, or

[1] von Rosen (1), p. 367 and fig. 332: 23—27.

7:Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10

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[302]

other inconvenient hair-growth, and which are still in use among the Chiriguano.[1]

I have noted a circumstance, previously unheeded, that, in my opinion, gives considerable weight to Nordenskiöld's theory as to the true Indian origin of the boivéra ornament. All breast ornaments of this kind have in their upper part a tubular horizontal perforation, open at both ends. In the middle of this barrel, and through the top, there is a hole. Through this barrel and upper hole is run the cord by which the ornament is worn round the neck (fig. 199). This rather peculiar arrangement for fixing the cord on which the ornament is hung, is found in the majority of such ancient Indian hanging ornaments, whistles and flutes of stone, as were meant to be worn a string. As an example, the remarkable ancient Indian stone flute, found in the earth in the vicinity of Iruya,[2] has at one end been bored through (fig. 200) in a manner exactly corresponding to the arrangement for the cord in the boivéra. This cord-fixing adaptation does not, to my knowledge, occur in any European object. For this reason it may surely be considered as very probable, not only that the original use of the boivéra as a pair of tweezers is of Indian origin, but also that the idea of carrying the tweezers on a string round the neck is Indian, and consequently has not originated from those more or less »white» jewellers that nowadays manufacture boivéra ornaments, and sell them to the Indians. I have in another book depicted a fragment of a small, pre-Spanish, ornamented bronze tweezers, which, like the boivéra, has a circular perforation at its upper end,[3] indicating that those tweezers, too, were worn on a cord, and consequently also in all likelihood served as a breast ornament.

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Fig. 200. Pan-pipe of stone. Ground-find from Iruya. Bolivia. 1/2. The dotted line marks the hole for fastening a string in the same way as for the breast ornament, fig. 199.

[439]

[1] Nordenskiöld (12), pp. 81—83, 92 and 94.
[2] von Rosen (10), pp. 147 and 148.
[3] von Rosen (10), fig. 211.

7: Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10

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if the arrow had not been given such a blob-shaped head. The force with which this lumpy head strikes its object, is sufficient to kill a middling-sized bird, provided the range is not too wide. The projection is intended for penetrating the feathers of the bird, so that the arrow shall not glance off the smooth plumage if the arrow should strike the bird at too acute an angle. These lumpy-headed arrows do not, as a rule, pierce the skin of the animal hit, which may be of advantage in killing small game.

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The pellet-bow is also used by the Chiriguano. Whether it forms a constituent part of South American culture, or whether it has been introduced from India or Europe, is a question not conclusively settled. For my part I consider it probable that also in South America this weapon is an independent invention, but that the type (especially as regards its chambering) possibly may have been subjected to influence from the *European* pellet-throwing crossbow.[1] The fact of the pellet-bow being, apparently, of more common occurrence on the Chaco than elsewhere, may be explained from proximity to the Andes, and influence from Andean civilization. Within the area of ancient Peruvian culture, the stone sling was the most important distance weapon, and we may be quite sure that the nations then inhabiting the wooded spurs of the eastern Andes got to know the stone slings of the mountain folk. In forest regions, however, slings are unpractical weapons, as, in the whirling preliminary to the throw, they are apt to get caught in tree branches. The idea of using pebbles as projectiles instead of arrows, has however been adopted by the forest-dwelling tribes, who have tried to convert it into shooting with the bow. A stone that has been shot away does not need to be retrieved, but the loss of an arrow is always a serious matter! To my mind, it is in this manner that the pellet-bow of South America has originated. In districts where there are no stones, as for instance the greater part of the Chaco, clay pellets are used instead of stones.

As an argument in support of the view that the pellet-bow is not originally a South American weapon, it has been pointed out that it is not found in Peru, Central America, or Mexico. Its absence in Peru is easily explained, as this country is in its greater part almost entirely treeless, so that here the stone sling would be a weapon so infinitely superior to the pellet-bow that the use of the latter would be purpose-

[1] For discussion of this matter, vide: Nordenskiöld (11), pp. 50—53. von Rosen (6), pp. 174—180. Nordenskiöld (12), pp. 26—30.

7: Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10

Fig. 215. A Chiriguano Indian with a fish spear. San Luis. Bolivia. Photo. E. v. R.

less. For the rest, the pellet-shooting long-bow is, compared with the pellet-shooting crossbow of the Old World, in any case a pretty poor weapon, both for war purposes and for hunting, which may explain its inconsiderable distribution even in well-wooded districts. Where this weapon nowadays occurs, it is only used for killing small birds, for target practice, and as a toy.

Fishing is carried on in the water courses with which the country is sparingly supplied. The Indians use hooks, nets, fish traps and weirs. These fishing methods are, however, almost exclusively used for fishing in rivers or largish bodies of water. In shallow streams and rivulets, the fish are shot with arrows, or speared with a two-pronged fish-gig. Fishing with poison is also said to be made use of.[1]

A fish trap consists of a large, bottle-shaped calabash, wide in its lower part, but with a narrow neck. The trap, which is placed under the lee of a few boughs stuck into the river bottom, must not be set in deeper water than makes it possible for a wading person to reach the neck of the calabash. Ground bait, consisting of crushed, sour, maize, is put into the calabash. The fish will then collect inside the calabash, and the fisherman has only to carefully raise the trap out of the water. In the sandy river banks ponds are dug, and connected by a small channel with the river. When fish have collected in the ponds, the connecting channel is blocked up, the pond emptied of water, and the fish gathered up.[2]

Fig. 216. Detail of the fish spear in fig. 215. The prongs are of hard wood. Chiriguano. San Luis. Bolivia. 1/6. Riksm. 03. 3. 904.

Among the Chiriguano Indians I visited, fish-shooting was a common practice. For this they used their smallest and weakest hunting bows. But it is also possible that those light bows I saw being used for shooting fish with, were exclusively employed for that purpose. If so, then the bow in fig. 202 is a fish bow. The arrows are long, and are usually provided with

[1] Nordenskiöld (12), p. 40.
[2] Nordenskiöld (18), pp. 170 and 171.

7:Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10

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using whistles of this type.[1] Nordenskiöld has advanced a theory as to the origin of the Serére whistle, which is highly interesting. On the ground of the similarity of construction that this type of whistle has to a balance beam shown in fig. 229, with its cords for weights and load still in preservation, found in Peru, Nordenskiöld is of the opinion that the Serére whistle is probably the beam of a balance, but that its original use has been forgotten.[2] By blowing, in play, into one end of such a balance beam, a tone was produced. This way of whistle-blowing gradually became widespread and popular, and, eventually, whistles were manufactured that were of a construction similar to that of the balance beams of the ancients. More and more the balances ceased to be used as such, and finally it was altogether forgotten that the whistle had been made as a copy of the balance beam.

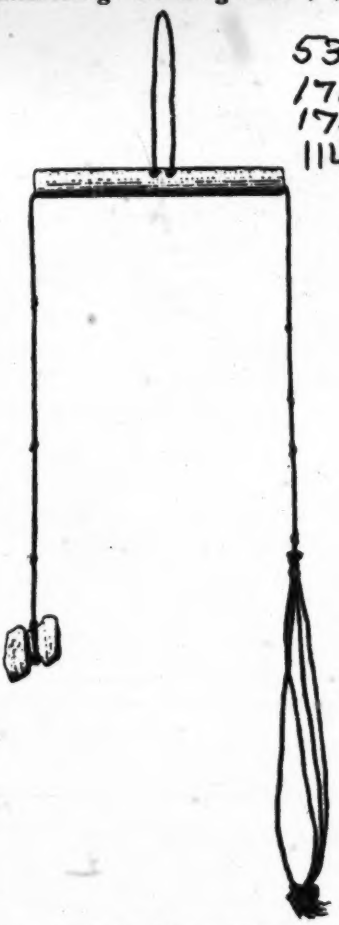

Fig. 229. Scale, with a wooden beam. Probably an improvisation from a whistle of Serére type, which forms the bar of the balance. Ground find from Peru. 1/4. Illustration from E. Nordenskiöld.

On my first acquaintance with this theory of the Serére whistle having originated from the balance beam, it seemed to me so well grounded that I accepted it.[3] But afterwards I quite changed my opinion in this question, for reasons set out below. The ancient Peruvian balance referred to by Nordenskiöld is undoubtedly of a very unpractical construction. Like the Serére whistle, the balance beam is *bored through from end to end*, and provided with *two holes, close together, for its suspension*. Even if in rough and primitive weighing there may occasionally be a certain advantage (a saving of time) in using a balance that is not too sensitive, suspending a balance from two

[1] Nordenskiöld (11), p. 185.
[2] Nordenskiöld (11), pp. 187—188.
[3] von Rosen (6), pp. 211—212.

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points of support, in the way shown in fig. 229, is unsuitable, as it would enable the holder of the balance to influence, with an imperceptible movement of his hand, the balancing of the beam. Another point which strikes me as peculiar, is, that the string by which weights and objects for weighing are suspended, should be made to pass through a hole that runs the whole length of the longitudinal axis of the beam. A perforation of such a length obviously represents a good deal of labour, which, moreover, in the case of a balance beam, would be quite unnecessary. Surely the simpler plan would have been to fix a string through a small hole at each end of the beam.

Fig. 230. Ancient Peruvian wooden whistle(?). 1/4. From Nordenskiöld. One end of the tube has been stopped up, possibly on account of the whistle having been found too hard-blown with both ends open. All other known Old Peruvian objects of this type have *both ends open*.

The above were my reasons for beginning to form the opinion that the Old Peruvian balance, fig. 229, had been rigged up to do duty as a makeshift. A proper balance not being at hand, a tubular whistle, fig. 230, was pressed into service. In this way the ancient Peruvian balance, fig. 229, would — if my theory is correct — simply prove to be *a whistle that had been provisionally fixed up as a weighing instrument.*

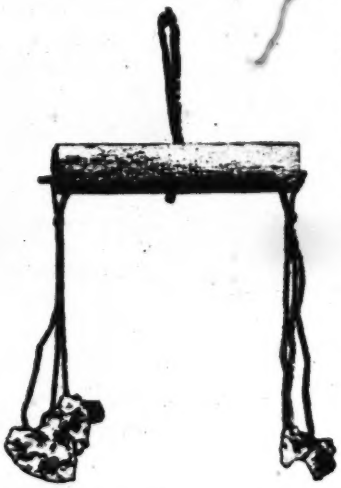

Fig. 231. Old Peruvian scale. From Hamy.

It is not impossible that this way of hastily improvising a balance — rather a dull one, admittedly, but usable for *rough weighing* — was not infrequently employed. When I acquainted Nordenskiöld with my theory as to the constructional purpose of the balance reproduced in fig. 229, he had the great kindness to send me all reproductions of Old Peruvian balances that were in his possession. Three of these retain the cord by which the beam was suspended (the poising cord), and *in these three, this cord is fixed through a hole in the centre of the beam*, fig. 231. Two of the balances are provided with cords on which to hang the weights and the objects to be weighed. *These cords are not taken through the full length of the balance beam, but attached to it by means of holes bored*

in each of the lower corners of the beam ends, fig. 231. From the illustrations representing the rest of the Old Peruvian balances it cannot be seen in what way the poising and weight cords were fixed. The balances in question have, however, been published in Hamy's grand work, Galerie américaine, and from that work I have therefore endeavoured to gain information concerning this matter. There is only one balance, one without weight cords, that has been given a detailed description, and regarding this, it is stated that the beam, at its centre, has *a vertical perforation* (for the poising cord), and that the lower corners of the beam ends are each pierced with a slanting hole (»les angles inférieurs sont aussi perforés mais obliquement»).[1] If one or more of the balances reproduced had been of a different construction in this detail, the fact would no doubt have been noted in the text.[2] From what I have adduced above, it therefore follows that the illustrative material, which Nordenskiöld so chivalrously submitted for my criticism of his theory, most essentially enhances the probability of my opinion that the unhandy Old Peruvian weighing apparatus shown in fig. 229, is an improvisation of a whistle which, as I aimed at proving in a separate monograph, belongs to a type of open whistles which is widely distributed over the American continent.[3]

As mentioned, the Chiriguano live in villages, and it is only exceptionally that one comes across isolated huts. Each village is under the authority of a headman, or chief.

Both sexes marry at an early age. Monogamy is the rule, but well-to-do men, and chiefs, may be found who have several wives. When a girl menstruates for the first time, her hair is cut short (fig. 194), and she is kept shut up in a hut until her hair has grown long again, after which she is considered marriageable. When a boy attains to puberty, a hole is made through his lower lip, and a wooden plug is put into the hole. Subsequently this is exchanged for a bead-studded »tembeta» (figs. 194 and 197). Marriages are celebrated by feasting, when large quantities of maize beer are consumed. The women pass through childbirth easily, and therefore do not require many days of nursing after the child has

[1] Hamy (1), p. 110.

[2] At the British Museum there is an ancient Peruvian scale apparently of the same construction as those described by Hamy. Joyce (1) p. 130, fig. 11

[3] von Rosen (8).

8: Schmidt--24 E-5 (1935) 1938 SF10 Chiriguano SF10
Guarani SM4

/11 cont./

C. Gi 175 178 167

The preceding historical sketch has shown that we can ascertain the history of the Chiriguano by means of numerous documents over a period of 400 years, up to that epoch so important for their future fate and culture, during which they emigrated from their native country and settled in a distant region. In this new country they found completely different conditions of life. All three factors by which all human life and all human culture are influenced and conditioned, nature, social state, and the spiritual culture of the ambient, were different in the new surroundings, and for that reason during the four centuries of their history they had to modify their primordial culture, which they had brought from their native country.

C 178 [126]

The products of their present-day culture, dealt with in this publication by means of the ethnographic collection that I brought from Machareti and Toledo, must be regarded as the result of numerous and different interacting factors. Some of the products of the old culture were kept in a fairly primordial form up to today; others were modified, either being perfected or in some cases degenerating. Many were completely lost because of the modified circumstances, and some were added as a result of the assimilation of outside cultures.

C. Gh 174 C [113]

As we have already said, the question of the influences on Chiriguano culture has been extensively dealt with by Erland Nordenskiöld (43). While the Chiriguano received relatively

43. Nord. 2, pp. 195-213. Cf. Alfred Métraux: "Etudes sur la civilisation des indiens Chiriguano /Studies on the Culture of the Chiriguano Indians/," Revista del Instituto de Etnología de la Universidad Nacional de Tucumán. Tucumán. Vol. I, No. 3 (cited in what follows as Métraux I), pp. 299 and 300.

8: Schmidt--25 E-5 (1935) 1938 SF10 Chiriguano SF10
Guarani SM4
Chane SF8

C Gi 177 174 /11 cont./ little from the Indians of the Chaco, we must derive the most important modifications in their culture from the influences of the ancient Peruvian culture. Because of the short duration of the Inca Empire after the time of the immigration of the Chiriguano, we must suppose that these influences were less direct influences than indirect ones through the confluent peoples of the mountainous land of Peru and Bolivia, who had been in contact with the ancient Peruvians for a long time and many of whom had been subjugated by the Chiriguano and made to enter into their community as slaves or vassals. We Ce [177] know that the culture of the Chané, who made up the greater part of the Chiriguano population, had contact with the ancient culture of the Peruvians. In contrast with the influence of the ancient Peruvian culture, the influence of the whites had rather more negative and destructive effects than constructive ones on the primordial culture of the Chiriguano and the Chané, leaving many native industries superfluous because it was more convenient to replace their products with imported merchandise.

C Ce 128 In the respective chapters that deal with the various developments of the culture of the Chiriguano and Chané, we shall expound the details of these cultural influences.

000 /12/ Physical Characteristics

Chiriguano and Chané Types Photographed in Machareti and Toledo

I.C. 354. Group of Chiriguano men, women, and children. Machareti. (Fig. 3.)
I.C. 335. Chiriguano men. Machareti. (Fig. 6.)
I.C. 361. Chiriguano children. Machareti. (Fig. 7.)
I.C. 359. Chiriguano women. Machareti. (Fig. 4.)
I.C. 360. Chiriguano women with babies. (Fig. 5.)
I.C. 362. Chiriguano children. (Fig. 8.)
I.C. 243. Izozó cacique. Toledo. (Fig. 10.)
I.C. 244. Izozó boy. Toledo. (Fig. 11.)
I.C. 245. Izozó lad. Toledo. (Fig. 13.)

/14 cont./

131 without our having any information on their stopping place. [563] [797] Some Chorote live in the territory of the Chiriguano, near Yacuiba, and also, without counting the missions, the whole territory has been penetrated by whites and mestizos.

131 ● 174 According to these data given by Nordenskiöld, the territory of the Chiriguano, after their definitive subjection by the whites and up to the present time, has remained the same as that which they had at the time of their independence, except, it would seem, that they have come down more into the valleys and do not now live, as was stated in the 16th century documents, on top of the inaccessible mountains, which, as natural fortresses, offered them a secure refuge during their expeditions.

Towns and Houses

361 177 The arrangement of the towns and the form of the houses of the Chiriguano are not at the present time the primordial ones, and they have probably passed through two different transformations, one after the other, first under the influence of the architecture of Inca culture and later the architecture of the whites. /15/ According to the Annua de la Compañia de Jesús Tucumán and Peru, of the year 1596, the Chiriguano towns were composed of only a few houses that were large enough to house as many as 100 persons. In his "Descripción breve de toda la tierra del Perú, Tucuman, Rio de la Plata y Chile /A Brief Description of all the Land of Peru, Tucumán, Río de la Plata, and Chile/," Father Lizarraga (56) describes the Chiriguano

361 344 62 [113]

56. Madrid, 1909. Nueva Biblioteca de Autores Españoles, Vol. 15. Cited in Nordenskiöld.

towns in the following way: "The largest of the towns is one of five houses: the common number is three; but they are very long, more than 150 paces, with a two-sloped roof with posts in the middle, upon which the framework is constructed, and one kin group /parentela/ lives between one post and the next one."

/16 cont./

343 the roof and the /Plates V-VII appear here/ /17/ platform.
335 The middle pair of the vertical posts is the longest pair and serves to hold up the ridgepole. Of the other eight vertical posts, always in two, one longer and one shorter, have been placed immediately next to each other all along the two sides of the middle pair of posts and at a certain distance from it. Of the horizontal posts, each one of which is held up by each one of the five pairs of vertical posts, those which are placed on the higher pair and on the two pairs of middle size of the vertical posts serve to hold up the roof, while the two horizontal posts which are placed on the two smaller pairs of vertical posts form the base for the platform of the house. Besides the five pairs of vertical posts that form the frame of the house, there is also added a vertical post of the height of the platform, which serves to support the ladder leading
343 to it. The roof of these storehouses is covered with straw like the roofs of dwellings. The walls are made of reed poles very close together. While the poles of the storehouse illustrated in Figure 16 are horizontal, those of other storehouses, with which we are familiar through Nordenskiöld's photographs and those of v. Rosen and Métraux, are vertical (69). The en-

69. Nord. 1, Figs. 83 and 84 and Pl. 18. Métraux I, Fig. 9, p. 349.

trance, which must be reached by means of the ladder, is at
[417] the gable end, like that of the dwellings. The ladder consists of a post with notches for steps (70).

70. Cf. Fig. 16, at the right. Nord. 1, Fig. 84. v. Rosen, op. cit., Fig. 191.

[171] There must be some special reason to explain the sur-
[174] prising fact that the Chiriguano have houses built on posts, since it could not be that they brought the custom of constructing them from their native soil, because the Guaraní have
000 never had them. Nor could it be that they adopted this from

[TEXT CONTINUES ON P. 42]

C 343 171 /17 cont./ mention the existence of such storehouses among these Indians, and thus we must suppose that the Churupí adopted this style of house construction only recently and probably from the Matako, with whom they have many contacts. /18/ To complete the data on the spread of houses built on posts, I shall also mention my observations on my expeditions of 1901 and 1910 to the Guató (73). Inside many houses, under the roof

73. Max Schmidt: Indianerstudien in Zentralbrasilien /Indian Studies in Central Brazil/, Berlin, 1904, p. 178.

and using long horizontal poles, these Indians build a platform which serves for storing various things. In this special arrangement of the Guató in building their houses, we find the rudiment of the true houses built on posts, and this is motivated by the great floods to which they were exposed even when they had been built in places higher than the marshy lands.

We should not consider houses built on posts as a product of the primordial culture of the Chaco tribes. It leaves as the only center of its propogation the zone in the interior of the South American continent which we have mentioned, the center of the ancient culture of the Aruaco /Arawak/ of these regions, the territory of the Mojo. The Chané, who were later subjugated by the Chiriguano and incorporated into their community, also belonged to this Aruaco culture. We must thus surmise that houses built on posts, like those we still find today among the Chiriguano and some of the Chané, first originated in the Chané culture and later passed to the Chiriguano when the cultures of these two tribes were fused into a single one.

No doubt the special construction of these storehouses has a different purpose today among the Chiriguano and the Chané than it had in the beginning. According to Nordenskiöld, the Chané of the lower Parapití River, which is a typically marshy region, do not have such houses, while they are common among the Chiriguano and also among the former who live on solid ground not exposed to floods. Their purpose

/22 cont./

352 513 [251] The Chiriguano generally sleeps on a kind of cot (catre), that is, a bed frame made of cane. Such beds, which in addition to their own purpose also serve for drying maize, have been represented in drawings by Eric v. Rosen (95), Erland

95. Eric v. Rosen, op. cit., p. 190.

[174] [178] v. Nordenskiöld (96), and Métraux (97). No doubt /23/ the

96. Nord. 2, Fig. 2.

97. Métraux 1, Fig. 125, p. 470.

cold climate of the region to which the Chiriguano had emigrated made them abandon the use of the hammock for sleeping, not very practical for such a climate, and replace it with the cot, which was already common among the tribes of those regions. Lacking a cot, the Chiriguano sleep on the ground. In that case they use for a bed large mats made of cane or palm leaves, or also hides (98). I acquired from the Chiriguano one

[232] [824] [126] [824]

98. Nord. 1, p. 177. V. Rosen, op. cit., p. 200. Métraux 1, p. 470.

such mat plaited out of palm leaves (Fig. 96).

Chiriguano Mat (túpa) in the Collection

I. A. 540. Length 1.75 m. Width 1.50 m. (Fig. 96).

352 17 [126] In some Chiriguano houses I also saw wooden benches (apika), but unfortunately I could not acquire a specimen. Those benches in the form of a sled are very similar to the kind of benches that are very common among the Indians of Brazil (99) and those that we also know from the ancient

[113] 99. Carly /sic/ von den Steinen: Unter den

C 302 /23 cont./
Viedma among the Chiriguano men (104), and Nordenskiöld

C [113]

104. Viedma: Descripción de la Provincia de Santa Cruz de la Sierra. Colección Angelis. Vol. 3. Buenos Aires, 1936. Written 1793. Page 181. According to Nordenskiöld.

found it among the women in the valley of Caipipendi (105).

105. Nord. 2, p. 85.

The latter used for that the leaves of a plant that they call "taju" (tayú = lapacho).

Ee 301 304 174 G 301 172

With respect to body deformations we can suppose that it was once a common custom among the Chané and Chiriguano to wear a "tembetá" in the pierced lower lip. Of the Guaraní of ancient times it has been stated that the men had this tembetá, and the custom is confirmed by prehistoric finds (106).

106. Cf. Antonio Serrano, op. cit., p. 122.

Ee 301 174

The form, material, and dimensions of these tembetá were varied and varied regionally. What was the shape of the tembetá that the Guaraní had when at the beginning of the 16th century they emigrated to the spurs of the Cordillera? We do not know. Neither do we know whether or not the Chané had the tembetá when they were enslaved by the Chiriguano. We can assume that the metal tembetás of the Chiriguano and the Chané in their present form have their origin in the period after their contacts with the ancient Peruvians, /24/ since they did not know the technique of working metal and even today most of their tembetás are made by nearby mestizos or whites, who make them to their taste. According to Chomé's (107)

Ee [199] [325]

C 301 C [113]

107. "Lettre du père Ignace Chomé." Lettres édifiantes et curieuses. New edition. Vol. 8. Paris. 1781, p. 326. According to Nordenskiöld 2, p. 73.

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/29 cont./
Because of this change the implement for plucking hair, consisting of small tweezers, formerly very common, has naturally lost a great part of its importance today, and similarly, in its transformed state as a chest ornament, it is rarer. I found such tweezers among the Mataco and the Churupí. Unfortunately I did not succeed in acquiring such tweezers or the corresponding chest ornament, called "boivera" also by the Chiriguano. Nordenskiöld describes these tweezers in detail (131),

131. Nord. 2, pp. 81 and 82.

and he adds that the Chiriguano also use small sticks of cane to pluck out hair.

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The form of these tweezers made of metal corresponds to that of the tweezers known through finds made in the burials of the ancient Peruvians. Today these tweezers are normally made of any piece of tin plate or sheet iron, which, when provided with a cord, they use for chest ornaments, besides their original purpose. This custom of using tweezers as a chest ornament was very common among the ancient Peruvians. Among the latter's necklaces there are many that, apart from other things, consist of silver tweezers. It was customary among the ancient Peruvians that these enlarged tweezers, unsuitable for their original purpose, be transformed into a pure and distinctive ornament. The Museum of Ethnography in Berlin has such ornaments in the form of depilatory tweezers, made of copper, silver, or gold, in great number, one example of which is 52 centimeters in length (132). Therefore I suppose

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132. Cf. Max Schmidt: Kunst und Kultur von Peru, Berlin, 1929, pp. 83, 369, 397, and 399.

we must deduce that the Chiriguano custom of using as a chest ornament a silver ornament in the form of one of those tweezers is due to ancient Peruvian influence. There are several specimens of the "boiveras," now rare and doubtless most of the time carefully kept from the view of the whites, in

/29 cont./

301 [439] European museums. These are not made by the Chiriguano themselves, but by their mestizo neighbors and sold to the Indians. The external form is still that of tweezers, much enlarged. But the boivera of today, discounting its size, also cannot be used for plucking hair because the two parts /30/ of its lower edge have been soldered. The fact that the decoration of the surface is not still primordial is explained by the fact that the Chiriguano are not the makers of these ornaments.

291 Clothing and Adornment

From the 16th century we have the brief description of the Chiriguano by Bishop Lizarraga (133) where, among other

[113] 133. Lizarraga: "Descripción et población de las Indias /Description and population of the Indies/." In Moreno II, p. 101.

things, it is said: "They go about naked or at the most sometimes have a short shirt /camisatilla/ down to the navel." We can assume that this statement by the Bishop as of that time refers only to the Chiriguano men, because it is likely that by the time of their immigration the Chiriguano women were wearing a garment which covered their genital organs, as we know the Guaraní women of the ancient Province of Uruguay did (134). It is likely that this garment had the same form as

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134. Serrano, op. cit., pp. 123 and 194.

the "tipoy," which is a garment in the form of a poncho without sewing and which even today is very common among Chiriguano and Chané women, as well as among various other Indian tribes of South America.

/35 cont./

According to these data concerning the region of spread of the game with a ball hit with the head, we must assume that the Chané, even before their subjugation by the Chiriguano, must have known this game, and that the Chiriguano of /36/ the Cordillera, like the Itatines-Guarayús, received it earlier from the Chané. The Chiriguano also play the game with a ball made of maize leaves struck with the hand, which we know from many other South American Indians (159). Ac-

159. Nord. 1, p. 188. Métraux 1, p. 44 and Fig. 11.

cording to Métraux, this game is not played except at the time when the maize is ripening, and it is related to the cultivation of maize.

With respect to other games of movement, the Chiriguano children play a game which corresponds to the game of polo and is very common among the Chaco tribes. The Chiriguano call it "taca." The ball is struck either, as among the Chorote and the Churupí, with curved sticks or with a primitive racket (160). No doubt the Chiriguano received this game

160. See Nord. 1, p. 198.

from neighboring Chaco tribes.

Of the games of skill, only one is played by adults and this only by women. It is a kind of bowling game that the Chiriguano in Tiburipa call "itarapía" and the Chané of the Parapití "tecoréa" (161). The bowling pins in this game

161. According to Nord. 1, p. 192.

consist of two rows of maize kernels, two by two, one on top of the other, or on a cob. They throw with stone balls or with a hollow ball of baked clay with little pellets of the same material inside (162).

162. Nord. 1, p. 192 and Fig. 98.

W. Schmidt--95 E-5 (1906) 1938 SF10 Chiriguano SF10
Chané SF8

/38 cont./

Because the ancient Peruvians raised various breeds of dogs, we can assume that the Chiriguano received the dog as a domestic animal from the ancient Peruvians. We can assume the same with regard to the duck, which was also raised by the ancient Peruvians. Therefore I do not include the duck among the domestic animals that these Indians received from the whites, as Nordenskiöld does. We do not know whether the Chiriguano in times past might have raised the llama. From the fact that guanacos exist in the territory located between the Parapití and the Río Grande, we can deduce that the raising of that other species of Euchenia might have been possible in that country.

The Chiriguano very early received such European domestic animals as the horse, the ass, the cow, sheep, goats, hogs, and chickens, which they captured in great quantities in their continual raids on the Spanish settlers. In 18th century documents there are repeated complaints about the extensive stealing of livestock by these Indians. Today the Chiriguano and Chané do not have many horses, and they have never had the /39/ pronounced character of a nation of horsemen. The true weapons of war were formerly a long bow and arrows which were also long, which cannot be used by a mounted horseman, in addition to which their homes were formerly in the hills in regions which the Spaniards could not enter on horseback. In certain parts of their territory the raising of cattle has some importance (181). More general is the raising of sheep, pigs,

181. See Métraux I, p. 340.

and chickens. Today one sometimes also finds among them guinea hens and turkeys (182).

182. Nord. I, p. 137.

K. Schmidt--98 E-5 (1935) 1938 SF10 Chiriguano SF10

Chané SF8
Izozo

Cg 411 126

/40 cont./

I.A. 747. (Inozó.) Length 0.97 m. Iron point; its length 24.5 cm. Cane shaft. Remnants of feathering.

I.A. 748. " Length 0.94 m. Iron point; its length 23.5 cm. Cane shaft. Without feathering. Fig. 37 f.)

I.A. 749. " Length 1.07 m. Iron point; its length 23.2 cm. Cane shaft. Without feathering.

I.A. 750. " Length 0.835 m. Iron point; its length 17 cm. Cane shaft. Without feathering. (Fig. 37h.)

I.A. 751. " Length 0.93 m. Iron point; its length 22.5 cm. Cane shaft. With feathering.

I.A. 752. " Length 0.92 m. Iron point; its length 27 cm. Cane shaft. With feathering.

I.A. 753. " Length 0.985 m. Iron point; its length 21.5 cm. Cane shaft. Perhaps with feathering.

Cg 411 174 177

Of the seven Inozó bows, the first four on the list are good specimens made of hard wood and correspond in all details to the Chiriguano bows described by v. Rosen (187), except for

187. v. Rosen, op. cit., pp. 206, 208.

their length, which is a few centimeters less than these. This difference in length is easily explained by the fact these Chiriguano bows were collected by v. Rosen in 1901 and 1902. It would be difficult today to find still among the Chiriguano bows as long as those which v. Rosen acquired 35 years ago. From Lizarraga's statement that the Chiriguano bows were of the same height as the bowman, it is evident that the bows of these Indians were formerly even longer than those described by v. Rosen. If, following Lehmann-Nitsche's somatic measurements mentioned above, we set the average height of Chiriguano men at 1.63 m., there is still a difference of 18 cm. between this figure and that of 1.45 m., which is the length of the longest bow among those collected by v. Rosen. We must consider this shortening of the Chiriguano and Chané bow,

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Chane SF8
Izozo

Ce 411 174 178

/40 cont./ steadily progressing, a consequence of its degeneration resulting from its gradually falling into disuse.

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The form of all the bows collected among the Izozó is the same, discounting the insignificant differences with regard to their length. The wood of the bow, which is approximately 3 cm. wide, is flat on the side towards the string and convex on the opposite side. To better fasten the bowstring, each of them is provided at its ends with a quite marked narrowing and always considerably shorter at the upper end than at the lower end. /41/ Three of these Izozó bows show, when not flexed, the reflex form already mentioned by v. Rosen with respect to the Chiriguano bows. The bowstring, made of twisted strips of animal hide, is fastened in the common manner used by South American Indians. By means of a noose with a knot, it goes around the narrowing of the upper end of the bow, while the loop at the lower end is made so that it can either shorten or lengthen the bowstring as necessary. Cf. Fig. 37, a and b /see p. 90/. In all these bows a large part of the string is rolled up as a reserve around the wood of the bow. Bow I. A. 757, whose wood shows cracks on the side toward the string, has wood reinforcements in two places, one of them consisting of a wrapping with thread and the other a piece of the skin of a cow's tail, which has been slipped like a sleeve over the wood of the bow. Cf. Figure 37 /see p. 90/.

Ce 411 183 [237] [284]

Ce [237]

Ce 411

The three bows I. A. 758-760, made of light-colored wood, correspond in form to the others, but they are poorly made and appear to be cheap merchandise for trading. Bow I. A. 760 even has a cable wire in place of a string.

C 411 524

The small Chiriguano bow I. A. 518 is a bow made for children for shooting light arrows with a wire point, which have been enumerated in great number in the above list.

C Ce 411 [223]

The length of the arrows I collected among the Chiriguano and Izozó is somewhat behind with respect to the length of the corresponding bows. The longest among them is a Chiriguano arrow for shooting birds, fitted with a club rather than a point, with a length of 1.11 m. Among the arrows fitted with iron

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drawings by v. Rosen and v. Nordenskiöld (194). This club is

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284 194. V. Rosen, op. cit., Fig. 212. Nord. 2, Fig. 6, D and E.

fastened directly on the inside of the upper part of the shaft. The shaft of the larger arrow is made of the same cane as that of the other arrows, and that of the smaller arrow is light wood. The binding on the upper part and also on the lower part of
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[239] the shaft of the longer arrow consists of cotton thread secured with wax. The two arrows have feathering and have the same groove at the bottom end of the shaft. Several specimens of Chiriguano bird-hunting arrows whose clubs show different forms are shown in drawings by Métraux (195).

195. Métraux I, Plates X-XI.

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174 The special form of the club of the arrows for shooting
[283] birds (cf. Fig. 37e) and the special method of binding the shaft with a cord of tree bark and the length which these arrows formerly had lead us to the conclusion that this type of arrow, equally common today among the Chiriguano and Chané, is the ancient form of arrow that the Chiriguano brought from their native soil to the west. I have already mentioned that the Chiriguano and Chané bows and arrows were formerly much longer. But we can also assume that these implements of the hunt and weapons of war, in accordance with their greater importance, were formerly better made than they are today.

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524 According to Nordenskiöld, only rarely does the bodoque, the bow for shooting balls, appear among the Chiriguano and Chané, and it is only used by youths and boys (196).

196. Nord. 2, p. 26.

8: Schmidt--149 E-5 (1935) 1938 SF10 Chiriguano SF10
Chané SF8

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Grinding the Raw Materials

For grinding raw materials, principally for grinding corn, the Chiriguano and Chané use large wooden mortars with long pestles (255). Such a wooden mortar is shown in Figure 15 and

255. Nord. 1, p. 51. Métraux I, p. 365, Fig. 30.

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another one by Nordenskiöld (256). Stone mills are not used by

256. Nord. 1, Fig. 116.

these Indians, although this implement was used, except for the Chaco tribes, by all the tribes whom the Chiriguano had as neighbors after their migration to the west. According to Métraux, a

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small stone mill is used only for grinding the seeds of a plant which the Chiriguano use as soap for washing their hair. Such a stone mill is shown in a drawing by Métraux (257).

257. Métraux I, p. 467, Fig. 122.

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Because the wooden mortar is common even today among the Kainguá /Caingua/, who also belong to the Guaraní linguistic group, and is also mentioned for the ancient Tupinambá /Tupiñamba/ of the eastern coast of Brazil, we can assume that the Chiriguano brought this cultural possession from their native land.

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The fact that mandioca is not important in the economy of these Indians explains why they do not use the wooden grater, the application of which is diffused among so many other Indian tribes of South America who cultivate this nourishing root.

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Making Cord and Thread

The thread that the Chiriguano and Chané make out of wool or cotton is spun by means of the spindle, while that made of caraguata is twisted by hand. We have no information on the way this caraguata thread is twisted.

8: Schmidt--173 E-5 (1935) 1938 SF10 Chiriguano SF10
Chané SF8

/68 cont./

In addition to this usual type of loom, there can also be found among the Chané and Chiriguano other special types which correspond to the ancient Peruvian types of looms for weaving bands. The fact that the mechanism of these looms makes possible the formation of more divisions of the warp threads, makes more variations in the ornamentation possible. Nordenskiöld shows such a Chiriguano loom in a drawing (273). No doubt this kind

273. Nord. 2, Fig. 55, N. 4.

of loom is a product of the influence of the culture of the ancient Peruvians.

For different purposes, very different weavings, most of which have already been mentioned in the chapter on clothing, can be made with a loom provided with a warp in the form of a ring as described above. With regard to the measurements of these fabrics, I refer the reader to what I have already said in this respect. The material of all of these woven fabrics consists of cotton or wool threads.

Woven Goods Made on the Loom Provided with a Warp in the Form of a Ring, from the Collection

1. Tipoys. I.A. 820, 832, and 838 (Izozó) (I.A. 820, Fig. 114).
2. Ponchos. I.A. 423-427 (Chiriguano) (I.A. 426, Fig. 118). I.A. 808-810, 812-815, 819, 823-825, 830, 831, 833-836 (Izozó) (I.A. 823, Fig. 117).
3. Mantas. I.A. 585 (Chiriguano). I.A. 816-818, 825-829 (Izozó) (I.A. 818, Fig. 120).
4. Bands of cotton for men's hair. I.A. 653-660 (Izozó) (I.A. 653, Figs. 30b and 108; I.A. 655, Figs. 30c and 109; I.A. 656, Figs. 30d and 110; I.A. 660, Figs. 30a and 107).

/Plates XXVIII-XXXI appear here./

/69/

5. Bands of human hair for men's hair. I.A. 739 and 765 (Izozó) (I.A. 739, Figs. 31 and 111).

[Text continues on P. 180]

/79 cont./

534 I. A. 494. Flute (Chiriguano). Cane. Lgth. 41 cm. (Fig. 34a.)
[126] I. A. 495. Double whistle " " " 33.5 and 7 cm. (Fig. 34b.)

[126] From the Chiriguano in Machareti I acquired two different kinds of flutes, the ones made of cane and the others made of wood. The two wooden flutes I. A. 491 and 492 (cf. Figs. 93a and 93b /see Fig. 33a and b, p. 89/) are of particular importance because of their similarity in form, and in the case of I. A. 491 of decoration as well, to a special kind of balance beam of the ancient Peruvians, and for that reason they have already been dealt with several times in ethnological literature. These two flutes are doubtless quite old specimens which perhaps had already been used by several generations. They are [322] called "sereré" by the Chiriguano, and they are of hard wood bored from one end to the other. In the middle of the upper edge of the lozenge of the apparatus, there are two small [301] perforations . A similar flute shown in a sketch by v. Rosen (299)

299. V. Rosen, op. cit., p. 220.

shows that these perforations serve for a string to pass through, in order that the flute may be worn as a chest ornament. 534 Nordenskiöld (300) has already called attention to the surprising 174 191

300. Nord. 3, pp. 187 and 188.

resemblance between these flutes and a special form of balance beam of the ancient Peruvians. These, numerous specimens of which are known, are no doubt classified as balance beams because of the fact that on some specimens /80/ the cord which passes through the horizontal perforation and which has at one end a weight and at the other end a loop, or some such similar thing for holding the objects that are to be weighed, has been preserved. V. Rosen, describing and showing in a drawing one of these Chiriguano flutes, which is like flute I. A. 491 except that it still has the cord which passes through the two holes on the upper

C /80 cont./
534 edge, puts forward against Nordenskiöld's deductions his opinion
174 that the ancient Peruvian objects of this form might originally
171 have been flutes and that they might have been used only exceptionally, in the event of necessity or only secondarily, as
C balance beams. Among the objects of this kind in the ancient
[114] Peruvian collection of the museum in Berlin so many specimens
C clearly show that they are balance beams that I cannot say that
[177] I agree with this opinion by V. Rosen (301). We must agree
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301. Cf. Max Schmidt, Kunst ünd Kultur von Peru /Art and Culture of Peru/, p. 99, fig. p. 544, N. 8-10.

with V. Nordenskiöld's opinion that these wooden objects used by the ancient Peruvians as balance beams may have been accepted by the Chiriguano, not as balance beams, because the Chiriguano did not have the need to weigh anything, but as flutes. We must mention that with this kind of flute, open at both ends, two different sounds can be produced, depending upon whether the lower hole is left open or is closed with the finger.

The two Chiriguano flutes made of cane have six holes for varying the sound and one hole, at one side, for the mouth. Cf. Figure 39a /see Fig. 34a, p. 89/. Nordenskiöld, who shows such a flute in a drawing (302), is of the opinion that the

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302. Nord. 2, Fig. 36 A.

Chiriguano and Chané received this kind of flute from the mestizos or whites, because such flutes provided with a hole at one side for the mouth do not exist among the other Indians of South America or among the ancient Peruvians.